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<210> 5832

<211> 322

<212> PRT

<213> Homo sapiens

<400> 5832

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 Arg Arg Ala Arg Pro Lys Phe Glu Gln Val Asn Leu Leu Asp Ser Asn
 50 55 60
 Ala Val His His Ile Ile His Asp Phe Gln Pro His Val Ile Val His
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 Cys Ala Ala Glu Arg Arg Pro Asp Val Val Glu Asn Gln Pro Asp Ala
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 Ala Ser Gln Leu Asn Val Asp Ala Ser Gly Asn Leu Ala Lys Glu Ala
 100 105 110
 Ala Ala Val Gly Ala Phe Leu Ile Tyr Ile Ser Ser Asp Tyr Val Phe
 115 120 125
 Asp Gly Thr Asn Pro Pro Tyr Arg Glu Glu Asp Ile Pro Ala Pro Leu
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 Asn Leu Tyr Gly Lys Thr Lys Leu Asp Gly Glu Lys Ala Val Leu Glu
 145 150 155 160
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 165 170 175
 Val Glu Lys Leu Glu Glu Ser Ala Val Thr Val Met Phe Asp Lys Val
 180 185 190
 Gln Phe Ser Asn Lys Ser Ala Asn Met Asp His Trp Gln Gln Arg Phe
 195 200 205
 Pro Thr His Val Lys Asp Val Ala Thr Val Cys Arg Gln Leu Ala Glu
 210 215 220
 Lys Arg Met Leu Asp Pro Ser Ile Lys Gly Thr Phe His Trp Ser Gly
 225 230 235 240
 Asn Glu Gln Met Thr Lys Tyr Glu Met Ala Cys Ala Ile Ala Asp Ala
 245 250 255
 Phe Asn Leu Pro Ser Ser His Leu Arg Pro Ile Thr Asp Ser Pro Val
 260 265 270
 Leu Gly Ala Gln Arg Pro Arg Asn Ala Gln Leu Asp Cys Ser Lys Leu
 275 280 285
 Glu Thr Leu Gly Ile Gly Gln Arg Thr Pro Phe Arg Ile Gly Ile Lys
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<210> 5833
 <211> 805
 <212> DNA
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<400> 5833
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<210> 5834
 <211> 268
 <212> PRT
 <213> Homo sapiens

<400> 5834
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 35 40 45
 Asn Asn Gln Glu Ser Phe Ile Ala Phe Ala Arg Val Phe Ser Gly Val
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 Ala Arg Arg Gly Lys Lys Ile Phe Val Leu Gly Pro Lys Tyr Ser Pro
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<400> 5836
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Tyr Glu Glu Lys Leu Lys Leu Val Ala Leu His Lys Gln Val Leu Met
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Gly Pro Tyr Asn Pro Asp Thr Cys Pro Glu Val Gly Phe Phe Asp Val
      50      55      60
Leu Gly Asn Asp Arg Arg Arg Glu Trp Ala Ala Leu Gly Asn Met Ser
65      70      75      80
Lys Glu Asp Ala Met Val Glu Phe Val Lys Leu Leu Asn Arg Cys Cys
      85      90      95
His Leu Phe Ser Thr Tyr Val Ala Ser His Lys Ile Glu Lys Glu Glu
      100      105      110
Gln Asp Lys Lys Arg Lys Glu Glu Glu Arg Arg Arg Arg Glu Glu
      115      120      125
Glu Glu Arg Glu Arg Leu Gln Lys Glu Glu Glu Lys
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<210> 5837

<211> 582

<212> DNA

<213> Homo sapiens

<400> 5837

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480
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<210> 5838

<211> 88

<212> PRT

<213> Homo sapiens

<400> 5838

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      20      25      30
Leu Ala Gln Lys Thr Asn Lys Ala Trp Ala Lys Gly Asp Ile Gln Gly

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      35              40              45
Ala Gly Ala Ala Ser Arg Arg Ala Phe Leu Leu Gly Val Leu Ala Val
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Gly Leu Gly Val Cys Thr Tyr Ala Ala Ala Leu Val Thr Leu Ala Ala
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Tyr Leu Ala Ser Arg Asp Pro Pro
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<210> 5839

<211> 1895

<212> DNA

<213> Homo sapiens

<400> 5839

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180
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1200

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<210> 5840

<211> 138

<212> PRT

<213> Homo sapiens

<400> 5840

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			20					25					30		
Leu	Met	Val	His	Gly	Trp	Cys	Pro	Val	Ile	Phe	Ser	Trp	Ala	Val	Ala
			35					40					45		
Pro	Arg	Gly	Ser	Gly	Phe	Pro	Ala	Gln	Gly	Ile	Phe	Asp	Pro	Cys	Gln
			50					55					60		
Arg	Arg	Glu	Arg	Glu	Leu	Ser	Trp	Phe	Pro	Phe	His	Leu	Phe	Ser	Gly
					70					75					80
Cys	Phe	Lys	Ala	Asn	Ile	Pro	Val	Pro	Asn	Val	Leu	Cys	Gly	Leu	Asn
				85					90					95	
Pro	Gly	Arg	Gly	Gln	Gly	His	Ile	Gln	Val	Gly	Leu	Ala	Ser	Ser	Thr
			100					105					110		
Thr	Phe	Trp	Pro	Gln	Gln	Arg	Met	Gly	Phe	His	Gln	Ser	Leu	Ser	Thr
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<210> 5841

<211> 3411

<212> DNA

<213> Homo sapiens

<400> 5841
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<210> 5842

<211> 460

<212> PRT

<213> Homo sapiens

<400> 5842

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Thr	Leu	Trp	Gly	His	Glu	Asn	Pro	Phe	Ser	Asp	Leu	Pro	Ser	Gly	Thr
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Leu	Asn	Phe	His	Pro	Val	Trp	Thr	Ser	Arg	Thr	Cys	Ser	Arg	Pro	Pro
	50					55					60				
Phe	Cys	Leu	Ser	Gln	Ile	Val	Gln	Leu	Lys	Ala	Ile	Asn	Val	Asp	Leu
65				70					75					80	
Gln	Ser	Asp	Ala	Ala	Leu	Gln	Val	Asp	Ile	Ser	Asp	Ala	Leu	Ser	Glu
			85					90					95		
Arg	Asp	Lys	Val	Lys	Phe	Thr	Val	His	Thr	Lys	Ser	Ser	Leu	Pro	Asn
	100							105					110		
Phe	Lys	Gln	Asn	Glu	Phe	Ser	Val	Val	Arg	Gln	His	Glu	Glu	Phe	Ile
	115						120					125			
Trp	Leu	His	Asp	Ser	Phe	Val	Glu	Asn	Glu	Asp	Tyr	Ala	Gly	Tyr	Ile
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Ile	Pro	Pro	Ala	Pro	Pro	Arg	Pro	Asp	Phe	Asp	Ala	Ser	Arg	Glu	Lys
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Thr	Lys	Met	Lys	Gln	Glu	Leu	Glu	Ala	Glu	Tyr	Leu	Ala	Ile	Phe	Lys
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Lys	Thr	Val	Ala	Met	His	Glu	Val	Phe	Leu	Cys	Arg	Val	Ala	Ala	His
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Glu	Tyr	His	Asn	Arg	Val	Lys	Asp	Ala	Ser	Ala	Lys	Ser	Asp	Arg	Met
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Thr	Arg	Ser	His	Lys	Ser	Ala	Ala	Asp	Asp	Tyr	Asn	Arg	Ile	Gly	Ser
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<210> 5843
<211> 6446
<212> DNA
<213> Homo sapiens
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840

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<211> 823

<212> PRT

<213> Homo sapiens

<400> 5844

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His Asp Ala Ile Thr Gly Thr Glu Ser Pro Lys Val Arg Asp Met Tyr
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<211> 2762

<212> DNA

<213> Homo sapiens

<400> 5845

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<213> Homo sapiens

<400> 5846

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<210> 5847

<211> 1021

<212> DNA

<213> Homo sapiens

<400> 5847

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<210> 5848

<211> 120

<212> PRT

<213> Homo sapiens

<400> 5848

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 35 40 45
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 50 55 60
 Val Arg Ser Leu Leu Ser Pro Gly Leu Leu Pro His Leu Leu Pro Ala
 65 70 75 80
 Leu Gly Phe Lys Asn Lys Thr Val Leu Lys Lys Arg Cys Lys Asp Cys
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<210> 5849

<211> 3174

<212> DNA

<213> Homo sapiens

<400> 5849

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 180
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<210> 5850

<211> 154

<212> PRT

<213> Homo sapiens

<400> 5850

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Cys	Thr	Gln	Thr	Gly	His	Ala	Gln	Pro	Cys	Pro	Ser	Ala	Pro	Ser	Thr
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Gly	Pro	Ile	His	Ile	Ala	Glu	Gly	Gly	Arg	Gly	Arg	Pro	Pro	Pro	Gly
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Ser	Ala	Ser	Asn	Pro	Gln	Pro	Pro	Gly	Ser	Pro	His	Cys	Pro	Ser	Ala
65			70					75						80	
Gly	Leu	Ser	Pro	Val	Pro	Gly	Val	Gly	Gly	Arg	Gln	Cys	Pro	Gly	Thr
		85				90						95			
Val	Pro	Arg	Val	Arg	Arg	Pro	Gly	Leu	Ala	Gly	His	Pro	Val	Thr	His
	100					105						110			
Arg	Ile	Asn	Arg	Lys	Thr	Ala	Ser	Pro	Pro	Asn	Leu	Cys	Pro	Arg	His
	115					120						125			
Asn	Met	Ser	Arg	Ser	Glu	Ser	Cys	Thr	Pro	Arg	Ser	Arg	Ala	Pro	Leu
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<210> 5851

<211> 488

<212> DNA

<213> Homo sapiens

<400> 5851

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 360
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<210> 5852

<211> 82

<212> PRT

<213> Homo sapiens

<400> 5852

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Asn	Lys	Thr	Ser	Glu	Asp	Val	Thr	Met	Ala	Ala	Ala	Ser	Pro	Val	Thr
			20					25					30		
Leu	Thr	Lys	Gly	Thr	Ser	Ala	Ala	His	Leu	Asn	Ser	Met	Glu	Val	Thr
		35				40					45				
Thr	Glu	Asp	Thr	Ser	Arg	Thr	Asp	Ala	Tyr	Glu	Ser	Tyr	Lys	Lys	Lys
	50				55					60					
Asp	Tyr	Thr	Gln	Val	Asp	Tyr	Leu	Ile	Asn	Gly	Met	Tyr	Ala	Asp	Ser
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Glu	Met														

<210> 5853

<211> 487

<212> DNA

<213> Homo sapiens

<400> 5853

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 487

<210> 5854

<211> 68

<212> PRT

<213> Homo sapiens

<400> 5854

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Tyr	Arg	Arg	Ser	Gln	Glu	Gly	Gly	Pro	Ala	Arg	Pro	Ala	Ala	Pro	Asp
			20					25					30		
Thr	Pro	Ser	Gly	Arg	Ser	Gly	Pro	Ala	Ala	Pro	Trp	Arg	Thr	Pro	Ala
		35					40					45			
Arg	Thr	Pro	Pro	Arg	Leu	Leu	Pro	Thr	Leu	Cys	Pro	Val	Thr	Pro	Val
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Ser	Trp	Pro	Leu												
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<210> 5855

<211> 362

<212> DNA

<213> Homo sapiens

<400> 5855

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<210> 5856

<211> 113

<212> PRT

<213> Homo sapiens

<400> 5856

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 Val Thr Ala Pro Leu Cys Ser Ala Asp Pro Leu Leu Ala Val Pro Pro
 20 25 30
 Ser Pro Pro Asp Pro Pro Ala Gly Thr Cys Trp Gly Leu Trp Gly Pro
 35 40 45
 Lys Arg Glu Gly Val Asn Glu Val Val Ala Glu Val Leu Leu Ala Ala
 50 55 60
 His Glu Gly Val Gly Asp Gln Gly Glu Ala Gly Ala His Pro Val Leu
 65 70 75 80
 Ser Asp Ala Gly Leu Leu Val Leu Gly Leu Arg Ala Ala Leu Gly Glu
 85 90 95
 His Gln Ala His Leu Gly Ser Ala Leu Asn Glu His Gln Arg Val Leu
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<210> 5857

<211> 1751

<212> DNA

<213> Homo sapiens

<400> 5857

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<210> 5858

<211> 434

<212> PRT

<213> Homo sapiens

<400> 5858

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 35 40 45
 Ile Leu Ala Arg Gly Gly Ser Lys Gly Ile Pro Leu Lys Asn Ile Lys
 50 55 60
 His Leu Ala Gly Val Pro Leu Ile Gly Trp Val Leu Arg Ala Ala Leu
 65 70 75 80
 Asp Ser Gly Ala Phe Gln Ser Val Trp Val Ser Thr Asp His Asp Glu
 85 90 95
 Ile Glu Asn Val Ala Lys Gln Phe Gly Ala Gln Val His Arg Arg Ser
 100 105 110
 Ser Glu Val Ser Lys Asp Ser Ser Thr Ser Leu Asp Ala Ile Ile Glu


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Phe Leu Asn Tyr His Asn Glu Val Asp Ile Val Gly Asn Ile Gln Ala
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Thr Ser Pro Cys Leu His Pro Thr Asp Leu Gln Lys Val Ala Glu Met
145      150      155      160
Ile Arg Glu Glu Gly Tyr Asp Ser Val Phe Ser Val Val Arg Arg His
      165      170      175
Gln Phe Arg Trp Ser Glu Ile Gln Lys Gly Val Arg Glu Val Thr Glu
      180      185      190
Pro Leu Asn Leu Asn Pro Ala Lys Arg Pro Arg Arg Gln Asp Trp Asp
      195      200      205
Gly Glu Leu Tyr Glu Asn Gly Ser Phe Tyr Phe Ala Lys Arg His Leu
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Ile Glu Met Gly Tyr Leu Gln Gly Gly Lys Met Ala Tyr Tyr Glu Met
225      230      235      240
Arg Ala Glu His Ser Val Asp Ile Asp Val Asp Ile Asp Trp Pro Ile
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Ala Glu Gln Arg Val Leu Arg Tyr Gly Tyr Phe Gly Lys Glu Lys Leu
      260      265      270
Lys Glu Ile Lys Leu Leu Val Cys Asn Ile Asp Gly Cys Leu Thr Asn
      275      280      285
Gly His Ile Tyr Val Ser Gly Asp Gln Lys Glu Ile Ile Ser Tyr Asp
      290      295      300
Val Lys Asp Ala Ile Gly Ile Ser Leu Leu Lys Lys Ser Gly Ile Glu
305      310      315      320
Val Arg Leu Ile Ser Glu Arg Ala Cys Ser Lys Gln Thr Leu Ser Ser
      325      330      335
Leu Lys Leu Asp Cys Lys Met Glu Val Ser Val Ser Asp Lys Leu Ala
      340      345      350
Val Val Asp Glu Trp Arg Lys Glu Met Gly Leu Cys Trp Lys Glu Val
      355      360      365
Ala Tyr Leu Gly Asn Glu Val Ser Asp Glu Glu Cys Leu Lys Arg Val
      370      375      380
Gly Leu Ser Gly Ala Pro Ala Asp Ala Cys Ser Thr Ala Gln Lys Ala
385      390      395      400
Val Gly Tyr Ile Cys Lys Cys Asn Gly Gly Arg Gly Ala Ile Arg Glu
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Phe Ala Glu His Ile Cys Leu Leu Met Glu Lys Val Asn Asn Ser Cys
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Gln Lys

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<210> 5859

<211> 2267

<212> DNA

<213> Homo sapiens

<400> 5859

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120

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aaatcacaaac ctctctcttg attccccttc acgctaagcc tctttcaaat tctttttcct

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180

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<210> 5860

<211> 96

<212> PRT

<213> Homo sapiens

<400> 5860

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Pro	Ala	Ala	Ala	Arg	Gln	Ser	Pro	Ala	Arg	Leu	His	Pro	Lys	Ser
			20					25				30		
Ser	Arg	Ala	Ser	Glu	Ala	Ser	Gly	Ser	Leu	Leu	Leu	Arg	Phe	Phe
		35					40					45		
Gln	Met	Gly	Leu	Gly	Arg	Cys	Arg	Phe	Cys	Phe	Ser	Pro	Trp	Leu
	50					55				60				
Val	Arg	Pro	Gln	Pro	Ser	Gly	Cys	Asp	Ile	Ile	Glu	Ser	Ala	Val
65				70				75					80	
Pro	Leu	Val	Gly	Asp	Trp	Gly	Ser	Val	Phe	Ser	His	Leu	Tyr	Leu
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<210> 5861

<211> 1951

<212> DNA

<213> Homo sapiens

<400> 5861

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 360

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1951

<210> 5862
 <211> 514
 <212> PRT
 <213> Homo sapiens

<400> 5862
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 Pro Asp Leu Lys Val Ile Tyr Ile Leu Val Arg Pro Lys Ala Gly Gln
 35 40 45
 Thr Leu Gln Gln Arg Val Phe Gln Ile Leu Asp Ser Lys Leu Phe Glu
 50 55 60
 Lys Val Lys Glu Val Cys Pro Asn Val His Glu Lys Ile Arg Ala Ile
 65 70 75 80
 Tyr Ala Asp Leu Asn Gln Asn Asp Phe Ala Ile Ser Lys Glu Asp Met
 85 90 95
 Gln Glu Leu Leu Ser Cys Thr Asn Ile Ile Phe His Cys Ala Ala Thr
 100 105 110
 Val Arg Phe Asp Asp Thr Leu Arg His Ala Val Gln Leu Asn Val Thr
 115 120 125
 Ala Thr Arg Gln Leu Leu Leu Met Ala Ser Gln Met Pro Lys Leu Glu
 130 135 140
 Ala Phe Ile His Ile Ser Thr Ala Tyr Ser Asn Cys Asn Leu Lys His
 145 150 155 160
 Ile Asp Glu Val Ile Tyr Pro Cys Pro Val Glu Pro Lys Lys Lys Ile
 165 170 175
 Ile Asp Ser Leu Glu Trp Leu Asp Asp Ala Ile Ile Asp Glu Ile Thr
 180 185 190
 Pro Lys Leu Ile Arg Asp Trp Pro Asn Ile Tyr Thr Tyr Thr Lys Ala
 195 200 205
 Leu Gly Glu Met Val Val Gln Gln Glu Ser Arg Asn Leu Asn Ile Ala
 210 215 220
 Ile Ile Arg Pro Ser Ile Val Gly Ala Thr Trp Gln Glu Pro Phe Pro
 225 230 235 240
 Gly Trp Val Asp Asn Ile Asn Gly Pro Asn Gly Ile Ile Ile Ala Thr
 245 250 255
 Gly Lys Gly Phe Leu Arg Ala Ile Lys Ala Thr Pro Met Ala Val Ala
 260 265 270
 Asp Val Ile Pro Val Asp Thr Val Val Asn Leu Met Leu Ala Val Gly
 275 280 285
 Trp Tyr Thr Ala Val His Arg Pro Lys Ser Thr Leu Val Tyr His Ile
 290 295 300
 Thr Ser Gly Asn Met Asn Pro Cys Asn Trp His Lys Met Gly Val Gln
 305 310 315 320
 Val Leu Ala Thr Phe Glu Lys Ile Pro Phe Glu Arg Pro Phe Arg Arg
 325 330 335
 Pro Asn Ala Asn Phe Thr Ser Asn Ser Phe Thr Ser Gln Tyr Trp Asn
 340 345 350
 Ala Val Ser His Arg Ala Pro Ala Ile Ile Tyr Asp Cys Tyr Leu Arg
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<400> 5864
Met Gly Glu Lys Asn Lys Gln Leu Gln Ile Arg His Cys Leu Ser Pro
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Asp Cys Ser Leu Pro Val Gly Gln Thr His Ser Asn Thr Lys Leu Phe
 20          25          30
Cys Gln Tyr Leu Ser Tyr Val Pro Phe Met Ala Glu Tyr Gln Ser Lys

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35 40 45
 Gln Pro Leu Glu Gln Gly Arg Thr Ser Val Phe Thr Leu Gly Ser Pro
 50 55 60
 Gly Tyr Gln Asn Pro Ala Pro Phe Ser Ile Asn Gln Ser Gln Thr Val
 65 70 75 80
 Asn Val Lys Thr Gly Thr Ser Cys Leu Glu Thr Gln Ile Leu Phe Gln
 85 90 95
 Glu Glu Tyr Leu Arg Ile Phe Leu
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<210> 5865

<211> 1229

<212> DNA

<213> Homo sapiens

<400> 5865

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 120
 aacaaccag gcatagtctt aacctttgtg ctccccacgg agcagttcca cttaggcaag
 180
 attgaggagc ttctcgtgga gagaacaggg gccccattct gctcccctac cagttccgga
 240
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 300
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<210> 5866
 <211> 212
 <212> PRT
 <213> Homo sapiens

<400> 5866
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 20 25 30
 Arg Ala Gly Arg Thr Ala Arg Ala Asn Asn Pro Gly Ile Val Leu Thr
 35 40 45
 Phe Val Leu Pro Thr Glu Gln Phe His Leu Gly Lys Ile Glu Glu Leu
 50 55 60
 Leu Val Glu Arg Thr Gly Ala Pro Phe Cys Ser Pro Thr Ser Ser Gly
 65 70 75 80
 Trp Arg Arg Ser Arg Ala Ser Ala Ile Ala Ala Gly Val His Pro Gln
 85 90 95
 Asp Ala Met Arg Ser Val Thr Lys Gln Ala Ile Arg Glu Ala Arg Leu
 100 105 110
 Lys Glu Ile Lys Glu Glu Leu Leu His Ser Glu Lys Leu Lys Thr Tyr
 115 120 125
 Phe Glu Asp Asn Pro Arg Asp Leu Gln Leu Leu Arg His Asp Leu Pro
 130 135 140
 Leu His Pro Ala Val Val Lys Pro His Leu Gly His Val Pro Asp Tyr
 145 150 155 160
 Leu Val Pro Pro Ala Leu Arg Gly Leu Val Arg Pro His Lys Lys Arg
 165 170 175
 Lys Lys Leu Ser Ser Ser Cys Arg Lys Ala Lys Arg Ala Lys Ser Gln
 180 185 190
 Asn Pro Leu Arg Ser Phe Lys His Lys Gly Lys Lys Phe Arg Pro Thr
 195 200 205
 Ala Lys Pro Ser
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<210> 5867
 <211> 1882
 <212> DNA
 <213> Homo sapiens

<400> 5867
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 gcgtccatt gccttcactg cccgttcacg gaagctctgg atcaacttca agacaagcga
 180
 ggccaacagc gcccggtggt tccagattcc ctatgttacc tatgatgagg actatgagca
 240

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300
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360
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1740
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1882

<210> 5868

<211> 131

<212> PRT

<213> Homo sapiens

<400> 5868

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Trp Ile Asn Phe Lys Thr Ser Glu Ala Asn Ser Ala Arg Gly Phe Gln
 35           40           45
Ile Pro Tyr Val Thr Tyr Asp Glu Asp Tyr Glu Gln Leu Val Glu Asp
 50           55           60
Ile Val Arg Asp Gly Arg Leu Tyr Ala Ser Glu Asn His Gln Glu Ile
 65           70           75           80
Leu Lys Asp Lys Lys Leu Ile Lys Ala Phe Phe Glu Val Leu Ala His
 85           90           95
Pro Gln Asn Tyr Phe Lys Tyr Thr Glu Lys His Lys Glu Met Leu Pro
100           105           110
Lys Ser Phe Ile Lys Leu Leu Arg Ser Lys Val Ser Ser Phe Leu Arg
115           120           125
Pro Tyr Lys
130
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<210> 5869

<211> 910

<212> DNA

<213> Homo sapiens

<400> 5869

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180
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240
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480
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600
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<210> 5870

<211> 129

<212> PRT

<213> Homo sapiens

<400> 5870

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			20					25					30		
Gly	Ser	Leu	Leu	Ile	Met	His	His	Glu	Ala	Ser	Thr	His	Arg	Val	Ile
		35				40						45			
Pro	Thr	Leu	Val	Gln	Thr	Gly	Leu	His	Gly	Arg	His	Ile	Leu	Gly	Arg
	50					55				60					
His	Val	Phe	Gly	Ser	Ala	Ala	Asn	Leu	Phe	Ser	Cys	Ala	Ile	Asp	Gln
65				70					75					80	
Val	Phe	Pro	Asn	Glu	Gly	Cys	Leu	Pro	Tyr	Ser	Cys	Gln	Glu	Pro	Asn
			85					90					95		
Ser	Ser	Leu	Gln	Tyr	Gln	Ile	Gln	Ser	Val	Val	Arg	Met	Lys	Cys	Gly
			100				105						110		
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<210> 5871

<211> 2217

<212> DNA

<213> Homo sapiens

<400> 5871

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 180
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 240
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 300

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1920

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<210> 5872

<211> 578

<212> PRT

<213> Homo sapiens

<400> 5872

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			20					25					30		
Leu	Tyr	Thr	Ser	Ser	Ser	His	His	Ser	His	Ser	Tyr	Ile	Gly	Leu	Pro
			35				40					45			
Tyr	Ala	Asp	His	Asn	Tyr	Gly	Ala	Arg	Pro	Pro	Pro	Thr	Pro	Pro	Ala
	50					55				60					
Ser	Pro	Pro	Pro	Ser	Val	Leu	Ile	Ser	Lys	Asn	Glu	Val	Gly	Ile	Phe
65					70				75					80	
Thr	Thr	Pro	Asn	Phe	Asp	Glu	Thr	Ser	Ser	Ala	Thr	Thr	Ile	Ser	Thr
			85					90					95		
Ser	Glu	Asp	Gly	Ser	Tyr	Gly	Thr	Asp	Val	Thr	Arg	Cys	Ile	Cys	Gly
			100				105						110		
Phe	Thr	His	Asp	Asp	Gly	Tyr	Met	Ile	Cys	Cys	Asp	Lys	Cys	Ser	Val
			115				120					125			
Trp	Gln	His	Ile	Asp	Cys	Met	Gly	Ile	Asp	Arg	Gln	His	Ile	Pro	Asp
			130				135				140				
Thr	Tyr	Leu	Cys	Glu	Arg	Cys	Gln	Pro	Arg	Asn	Leu	Asp	Lys	Glu	Arg
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Ala	Val	Leu	Leu	Gln	Arg	Arg	Lys	Arg	Glu	Asn	Met	Ser	Asp	Gly	Asp
			165						170					175	
Thr	Ser	Ala	Thr	Glu	Ser	Gly	Asp	Glu	Val	Pro	Val	Glu	Leu	Tyr	Thr
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<213> Homo sapiens

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<400> 5876

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Leu	Leu	Phe	Gly	Arg	Leu	Asn	Gly	Leu	Ser	Ser	Asp	Ser	Thr	Ile
	210					215					220			Asp
Ile	Leu	Tyr	Gln	Leu	Gly	Thr	Thr	Gln	Asp	Pro	Gly	Thr	Lys	Asp
225					230				235					Arg
Ile	Gln	Ala	Leu	Leu	Lys	Trp	Val	Ser	Asp	Ser	Ala	Arg	Val	Ala
		245						250				255		Ala
Met	Lys	Arg	Ser	Gly	Arg	Met	Asn	Tyr	Met	Cys	Pro	Asn	Ser	Ser
		260					265					270		Thr
Val	Glu	Tyr	Gly	Leu	Leu	Met	Pro	Ser	Pro	Ser	His	Leu	His	Cys
	275					280					285			Val
Ala	Ala	Ile	Leu	Trp	His	Ser	Tyr	Glu	Leu	Leu	Val	Glu	Tyr	Asp
	290				295						300			Leu
Pro	Ala	Leu	Leu	Asp	Gln	Glu	Leu	Phe	Glu	Leu	Leu	Phe	Asn	Trp
305					310				315					Ser
Met	Ser	Leu	Pro	Cys	Asn	Met	Val	Leu	Lys	Lys	Ala	Val	Asp	Ser
			325						330				335	Leu
Leu	Cys	Ser	Met	Cys	His	Val	His	Pro	Asn	Tyr	Phe	Ser	Leu	Met
		340					345					350		
Gly	Trp	Met	Gly	Ile	Thr	Pro	Pro	Pro	Val	Gln	Cys	His	His	Arg
	355					360				365				Leu
Ser	Met	Thr	Asp	Asp	Ser	Lys	Lys	Gln	Asp	Leu	Ser	Ser	Ser	Leu
	370					375			380					Thr
Asp	Asp	Ser	Lys	Asn	Ala	Gln	Ala	Pro	Leu	Ala	Leu	Thr	Glu	Ser
385				390					395					His
Leu	Ala	Thr	Leu	Ala	Ser	Ser	Ser	Gln	Ser	Pro	Glu	Ala	Ile	Lys
			405					410					415	Gln
Leu	Leu	Asp	Ser	Gly	Leu	Pro	Ser	Leu	Leu	Val	Arg	Ser	Leu	Ala
		420					425				430			Ser
Phe	Cys	Phe	Ser	His	Ile	Ser	Ser	Ser	Glu	Ser	Ile	Ala	Gln	Ser
	435					440					445			Ile
Asp	Ile	Ser	Gln	Asp	Lys	Leu	Arg	Arg	His	His	Val	Pro	Gln	Gln
	450				455				460					Cys
Asn	Lys	Met	Pro	Ile	Thr	Ala	Asp	Leu	Val	Ala	Pro	Ile	Leu	Arg
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Leu	Thr	Glu	Val	Gly	Asn	Ser	His	Ile	Met	Lys	Asp	Trp	Leu	Gly
			485					490					495	Gly
Ser	Glu	Val	Asn	Pro	Leu	Trp	Thr	Ala	Leu	Leu	Phe	Leu	Leu	Cys
														His

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Ser	Gly	Ser	Thr	Ser	Gly	Ser	His	Asn	Leu	Gly	Ala	Gln	Gln	Thr	Ser
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Ala	Arg	Ser	Ala	Ser	Leu	Ser	Ser	Ala	Ala	Thr	Thr	Gly	Leu	Thr	Thr
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Gln	Gln	Arg	Thr	Ala	Ile	Glu	Asn	Ala	Thr	Val	Ala	Phe	Phe	Leu	Gln
545				550				555				560			
Cys	Ile	Ser	Cys	His	Pro	Asn	Asn	Gln	Lys	Leu	Met	Ala	Gln	Val	Leu
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Cys	Glu	Leu	Phe	Gln	Thr	Ser	Pro	Gln	Arg	Gly	Asn	Leu	Pro	Thr	Ser
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Gly	Asn	Ile	Ser	Gly	Phe	Ile	Arg	Arg	Leu	Phe	Leu	Gln	Leu	Met	Leu
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Glu	Asp	Glu	Lys	Val	Thr	Met	Phe	Leu	Gln	Ser	Pro	Cys	Pro	Leu	Tyr
610				615				620							
Lys	Gly	Arg	Ile	Asn	Ala	Thr	Ser	His	Val	Ile	Gln	His	Pro	Met	Tyr
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Gly	Ala	Gly	His	Lys	Phe	Arg	Thr	Leu	His	Leu	Pro	Val	Ser	Thr	Thr
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Leu	Ser	Asp	Val	Leu	Asp	Arg	Val	Ser	Asp	Thr	Pro	Ser	Ile	Thr	Ala
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Lys	Leu	Ile	Ser	Glu	Gln	Lys	Asp	Lys	Glu	Lys	Lys	Asn	His	Glu	
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Glu	Lys	Glu	Lys	Val	Lys	Ala	Glu	Asn	Gly	Phe	Gln	Asp	Asn	Tyr	Ser
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Val	Val	Val	Ala	Ser	Gly	Leu	Lys	Ser	Gln	Ser	Lys	Arg	Ala	Val	Ser
705				710				715				720			
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Lys	Ile	Gly	Ser	Thr	Ser	Gly	Ala	Glu	Ala	Ala	Asn	Lys	Ile	Ile	Thr
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Val	Pro	Val	Phe	His	Leu	Phe	His	Lys	Leu	Leu	Ala	Gly	Gln	Pro	Leu
755				760				765							
Pro	Ala	Glu	Met	Thr	Leu	Ala	Gln	Leu	Leu	Thr	Leu	Leu	Tyr	Asp	Arg
770				775				780							
Lys	Leu	Pro	Gln	Gly	Tyr	Arg	Ser	Ile	Asp	Leu	Thr	Val	Lys	Leu	Gly
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Ser	Arg	Val	Ile	Thr	Asp	Pro	Ser	Leu	Ser	Lys	Thr	Asp	Ser	Tyr	Lys
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Arg	Leu	His	Pro	Glu	Lys	Asp	His	Gly	Asp	Leu	Leu	Ala	Ser	Cys	Pro
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835				840				845							
Asp	Glu	Ser	Leu	Leu	Glu	Thr	Cys	Pro	Ile	Gln	Ser	Pro	Leu	Gln	Val
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Phe	Ala	Gly	Met	Gly	Gly	Leu	Ala	Leu	Ile	Ala	Glu	Arg	Leu	Pro	Met
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Leu	Tyr	Pro	Glu	Val	Ile	Gln	Gln	Val	Ser	Ala	Pro	Val	Val	Thr	Ser
885				890				895							
Thr	Thr	Gln	Glu	Lys	Pro	Lys	Asp	Ser	Asp	Gln	Phe	Glu	Trp	Val	Thr
900				905				910							
Ile	Glu	Gln	Ser	Gly	Glu	Leu	Val	Tyr	Glu	Ala	Pro	Glu	Thr	Val	Ala
915				920				925							
Ala	Glu	Pro	Pro	Pro	Ile	Lys	Ser	Ala	Val	Gln	Thr	Met	Ser	Pro	Ile

930	935	940
Pro Ala His Ser Leu	Ala Ala Phe Gly Leu	Phe Leu Arg Leu Pro Gly
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Tyr Ala Glu Val Leu	Lys Glu Arg Lys His Ala Gln Cys Leu Leu	960
	965	970
Arg Leu Val Leu Gly Val Thr Asp Asp Gly Glu Gly Ser His Ile Leu		975
	980	985
Gln Ser Pro Ser Ala Asn Val Leu Pro Thr Leu Pro Phe His Val Leu		990
	995	1000
Arg Ser Leu Phe Ser Thr Thr Pro Leu Thr Thr Asp Asp Gly Val Leu		1005
	1010	1015
Leu Arg Arg Met Ala Leu Glu Ile Gly Ala Leu His Leu Ile Leu Val		1020
1025	1030	1035
Cys Leu Ser Ala Leu Ser His His Ser Pro Arg Val Pro Asn Ser Ser		1040
	1045	1050
Val Asn Gln Thr Glu Pro Gln Val Ser Ser Ser His Asn Pro Thr Ser		1055
	1060	1065
Thr Glu Glu Gln Gln Leu Tyr Trp Ala Lys Gly Thr Gly Phe Gly Thr		1070
	1075	1080
Gly Ser Thr Ala Ser Gly Trp Asp Val Glu Gln Ala Leu Thr Lys Gln		1085
	1090	1095
Arg Leu Glu Glu Glu His Val Thr Cys Leu Leu Gln Val Leu Ala Ser		1100
1105	1110	1115
Tyr Ile Asn Pro Val Ser Ser Ala Val Asn Gly Glu Ala Gln Ser Ser		1120
	1125	1130
His Glu Thr Arg Gly Gln Asn Ser Asn Ala Leu Pro Ser Val Leu Leu		1135
	1140	1145
Glu Leu Leu Ser Gln Ser Cys Leu Ile Pro Ala Met Ser Ser Tyr Leu		1150
	1155	1160
Arg Asn Asp Ser Val Leu Asp Met Ala Arg His Val Pro Leu Tyr Arg		1165
	1170	1175
Ala Leu Leu Glu Leu Leu Arg Ala Ile Ala Ser Cys Ala Ala Met Val		1180
1185	1190	1195
Pro Leu Leu Leu Pro Leu Ser Thr Glu Asn Gly Glu Glu Glu Glu Glu		1200
	1205	1210
Gln Ser Glu Cys Gln Thr Ser Val Gly Thr Leu Leu Ala Lys Met Lys		1215
	1220	1225
Thr Cys Val Asp Thr Tyr Thr Asn Arg Leu Arg Ser Lys Arg Glu Asn		1230
	1235	1240
Val Lys Thr Gly Val Lys Pro Asp Ala Ser Asp Gln Glu Pro Glu Gly		1245
	1250	1255
Leu Thr Leu Leu Val Pro Asp Ile Gln Lys Thr Ala Glu Ile Val Tyr		1260
1265	1270	1275
Ala Ala Thr Thr Ser Leu Arg Arg Ala Asn Gln Glu Lys Lys Leu Gly		1280
	1285	1290
Glu Tyr Ser Lys Lys Ala Ala Met Lys Pro Lys Pro Leu Ser Val Leu		1295
	1300	1305
Lys Ser Leu Glu Glu Lys Tyr Val Ala Val Met Lys Lys Leu Gln Phe		1310
	1315	1320
Asp Thr Phe Glu Met Val Ser Glu Asp Glu Asp Gly Lys Leu Gly Phe		1325
	1330	1335
Lys Val Asn Tyr His Tyr Met Ser Gln Val Lys Asn Ala Asn Asp Ala		1340
1345	1350	1355
Asn Ser Ala Ala Arg Ala Arg Arg Leu Ala Gln Glu Ala Val Thr Leu		1360

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 Ser Thr Ser Leu Pro Leu Ser Ser Ser Ser Val Phe Val Arg Cys
 1380 1385 1390
 Asp Glu Glu Arg Leu Asp Ile Met Lys Val Leu Ile Thr Gly Pro Ala
 1395 1400 1405
 Asp Thr Pro Tyr Ala Asn Gly Cys Phe Glu Phe Asp Val Tyr Phe Pro
 1410 1415 1420
 Gln Asp Tyr Pro Ser Ser Pro Pro Leu Val Asn Leu Glu Thr Thr Gly
 1425 1430 1435 1440
 Gly His Ser Val Arg Phe Asn Pro Asn Leu Tyr Asn Asp Gly Lys Val
 1445 1450 1455
 Cys Leu Ser Ile Leu Asn Thr Trp His Gly Arg Pro Glu Glu Lys Trp
 1460 1465 1470
 Asn Pro Gln Thr Ser Ser Phe Leu Gln Val Leu Val Ser Val Gln Ser
 1475 1480 1485
 Leu Ile Leu Val Ala Glu Pro Tyr Phe Asn Glu Pro Gly Tyr Glu Arg
 1490 1495 1500
 Ser Arg Gly Thr Pro Ser Gly Thr Gln Ser Ser Arg Glu Tyr Asp Gly
 1505 1510 1515 1520
 Asn Ile Arg Gln Ala Thr Val Lys Trp Ala Met Leu Glu Gln Ile Arg
 1525 1530 1535
 Asn Pro Ser Pro Cys Phe Lys Glu Val Ile His Lys His Phe Tyr Leu
 1540 1545 1550
 Lys Arg Val Glu Ile Met Ala Gln Cys Glu Glu Trp Ile Ala Asp Ile
 1555 1560 1565
 Gln Gln Tyr Ser Ser Asp Lys Arg Val Gly Arg Thr Met Ser His His
 1570 1575 1580
 Ala Ala Ala Leu Lys Arg His Thr Ala Gln Leu Arg Glu Glu Leu Leu
 1585 1590 1595 1600
 Lys Leu Pro Cys Pro Glu Gly Leu Asp Pro Asp Thr Asp Ala Pro
 1605 1610 1615
 Glu Val Cys Arg Ala Thr Thr Gly Ala Glu Glu Thr Leu Met His Asp
 1620 1625 1630
 Gln Val Lys Pro Ser Ser Ser Lys Glu Leu Pro Ser Asp Phe Gln Leu
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<210> 5877

<211> 683

<212> DNA

<213> Homo sapiens

<400> 5877

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 120
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 180
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 240
 ctggtctcag gaggagatga ccgcccgggt ctgctatggc acatggaaca agccatccac
 300
 tccagggtca agccatata gctgaaagga gagcaccatt ccaacatttt ttgcttggt
 360

ttcaacagtg ggaacactaa agtggttctct ggaggcaatg atgagcaagt tatcctccat
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 480
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 540
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<210> 5878

<211> 227

<212> PRT

<213> Homo sapiens

<400> 5878

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 Arg Gly Leu His Gly Asp Pro Leu Thr Gln Asp Phe Gln Arg Arg
 35 40 45
 Arg Leu Arg Gly Cys Arg Asn Leu Tyr Lys Lys Asp Leu Leu Gly His
 50 55 60
 Phe Gly Cys Val Asn Ala Ile Glu Phe Ser Asn Asn Gly Gly Gln Trp
 65 70 75 80
 Leu Val Ser Gly Gly Asp Asp Arg Arg Val Leu Leu Trp His Met Glu
 85 90 95
 Gln Ala Ile His Ser Arg Val Lys Pro Ile Gln Leu Lys Gly Glu His
 100 105 110
 His Ser Asn Ile Phe Cys Leu Ala Phe Asn Ser Gly Asn Thr Lys Val
 115 120 125
 Phe Ser Gly Gly Asn Asp Glu Gln Val Ile Leu His Asp Val Glu Ser
 130 135 140
 Ser Glu Thr Leu Asp Val Phe Ala His Glu Asp Ala Val Tyr Gly Leu
 145 150 155 160
 Ser Val Ser Pro Val Asn Asp Asn Ile Phe Ala Ser Ser Ser Asp Asp
 165 170 175
 Gly Arg Val Leu Ile Trp Asp Ile Arg Glu Ser Pro His Gly Glu Pro
 180 185 190
 Phe Cys Trp Ala Asn Tyr Pro Ser Ala Phe His Ser Val Met Phe Asn
 195 200 205
 Pro Val Glu Pro Arg Leu Leu Ala Pro Ala Asn Ser Lys Glu Gly Val
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 Gly Leu Trp
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<210> 5879

<211> 1555

<212> DNA

<213> Homo sapiens

<400> 5879

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300
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360
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420
gtcaataaat ccataaccag caatactatg gggcctgggg tgcgctggcc tttagttagt
480
ggagtggggc gaaggatgct gcatgtcctg cagtgggcac agcgccctg cacgggggag
540
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600
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660
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720
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780
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1320
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1380
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1440
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<210> 5882
<211> 109
<212> PRT
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<213> Homo sapiens

<400> 5882

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Ala Lys Glu Asn Met Val Thr Phe Ser His Thr Leu Pro Arg Ala Ser
             35             40             45
Ala Pro Ser Leu Asp Asp Pro Ala Arg Arg His Met Thr Ile His Val
             50             55             60
Pro Leu Asp Ala Ser Arg Ser Lys Gln Leu Ile Ser Glu Trp Lys Gln
             65             70             75             80
Lys Ser Leu Glu Gly Arg Gly Leu Gly Leu Pro Asp Asp Ala Ser Pro
             85             90             95
Gly His Leu Arg Ala Pro Ala Glu Pro Met Pro Glu Xaa
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<210> 5883

<211> 579

<212> DNA

<213> Homo sapiens

<400> 5883

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120
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180
cagatttgtc gcctctgtcc ccgaagacac ctgcaccctc catgcggagc caagatgggg
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480
ggagcgatgg ctgaaggagc tctatgacca tgctgaagcc acgatcgctg tcatgctcgt
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<210> 5884

<211> 71

<212> PRT

<213> Homo sapiens

<400> 5884

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Leu Ile Gly Glu Ser Gly Val Gly Lys Thr Asn Leu-Leu Ser Arg-Phe

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	20		25		30										
Thr	Arg	Asn	Glu	Phe	Ser	His	Asp	Ser	Arg	Thr	Thr	Ile	Gly	Val	Glu
	35					40						45			
Phe	Ser	Thr	Arg	Thr	Val	Met	Leu	Gly	Thr	Ala	Ala	Val	Lys	Ala	Gln
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<210> 5885

<211> 1905

<212> DNA

<213> Homo sapiens

<400> 5885

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 ctgctgagtg gccttgagga cgaaccccg caggagcaag cagtacagtg gcattcccag
 1320
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 1800
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<210> 5886

<211> 265

<212> PRT

<213> Homo sapiens

<400> 5886

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		20					25					30			
Gly	Ala	Gly	Pro	Leu	Tyr	Ser	His	His	Leu	Pro	Thr	Ser	Pro	Leu	Gln
		35					40					45			
Lys	Ala	Leu	Leu	Ala	Ala	Gly	Ser	Ala	Ala	Met	Ala	Leu	Tyr	Asn	Pro
	50					55				60					
Tyr	Arg	His	Asp	Met	Val	Ala	Val	Leu	Gly	Glu	Thr	Thr	Gly	His	Arg
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Thr	Leu	Lys	Val	Leu	Arg	Asp	Gln	Met	Arg	Arg	Asp	Pro	Glu	Gly	Ala
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<210> 5887

<211> 3779

<212> DNA

<213> Homo sapiens

<400> 5887

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<212> PRT

<213> Homo sapiens

<400> 5888

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<211> 2198

<212> DNA

<213> Homo sapiens

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<210> 5890

<211> 118

<212> PRT

<213> Homo sapiens

<400> 5890

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<210> 5891

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<212> DNA

<213> Homo sapiens

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<212> PRT

<213> Homo sapiens

<400> 5892

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<212> DNA

<213> Homo sapiens

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<211> 260

<212> PRT

<213> Homo sapiens

<400> 5894

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 Glu Ile Val Pro Glu Asp Asp Pro Gln Asn Ala Ile Val Ser Ser Ser
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 Ala Asp Ala Cys His Ala Glu Leu Leu Arg Thr Ile Ser Thr Thr Met
 115 120 125
 Gly Lys Leu Met Pro Asn Leu Leu Pro Ala Gly Ala Asp Phe Phe Gly
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 Arg Lys Cys Ile Asn Tyr Gln Trp Val Lys Phe Asp Val Cys Lys Pro
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 Gly Asp Gly Gln Leu Pro Glu Gly Leu Pro Glu Asn Asp Ala Ala Met
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 Ser Phe Glu Ala Phe Gln Arg Gln Ile Phe Asp Glu Asp Gln Asn Asp
 195 200 205
 Pro Leu Leu Pro Gly Ser Leu Asp Leu Pro Glu Leu Gln Pro Ala Ala
 210 215 220
 Phe Val Ser Ser Tyr Gln Pro Met Tyr Leu Thr His Glu Pro Leu Val
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<210> 5895

<211> 2748

<212> DNA

<213> Homo sapiens

<400> 5895

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<210> 5896

<211> 261

<212> PRT

<213> Homo sapiens

<400> 5896

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			20					25					30		
Arg	Asp	Leu	Gly	Gly	Ser	Ser	Ala	Ala	Thr	Glu	Ala	Val	Ala	Ile	Leu
		35					40					45			
Thr	Ala	Thr	Tyr	Pro	Val	Gly	His	Met	Pro	Tyr	Gly	Trp	Leu	Thr	Glu
	50					55					60				
Ile	Arg	Ala	Val	Tyr	Pro	Ala	Phe	Asp	Lys	Asn	Asn	Pro	Ser	Asn	Lys
65					70					75					80
Leu	Val	Ser	Thr	Ser	Asn	Thr	Val	Thr	Ala	Ala	His	Ile	Lys	Lys	Phe
			85						90				95		
Thr	Phe	Val	Cys	Met	Ala	Leu	Ser	Leu	Thr	Leu	Cys	Phe	Val	Met	Phe
			100					105					110		
Trp	Thr	Pro	Asn	Val	Ser	Glu	Lys	Ile	Leu	Ile	Asp	Ile	Ile	Gly	Val
		115					120					125			
Asp	Phe	Ala	Phe	Ala	Glu	Leu	Cys	Val	Val	Pro	Leu	Arg	Ile	Phe	Ser
	130					135				140					
Phe	Phe	Pro	Val	Pro	Val	Thr	Val	Arg	Ala	His	Leu	Thr	Gly	Trp	Leu
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Met	Thr	Leu	Lys	Lys	Thr	Phe	Val	Leu	Ala	Pro	Ser	Ser	Val	Leu	Arg
			165					170					175		
Ile	Ile	Val	Leu	Ile	Ala	Ser	Leu	Val	Val	Leu	Pro	Tyr	Leu	Gly	Val

	180		185		190
His Gly Ala Thr Leu Gly Val Gly Ser Leu Leu Ala Gly Phe Val Gly					
195		200		205	
Glu Ser Thr Met Val Ala Ile Ala Ala Cys Tyr Val Tyr Arg Lys Gln					
210		215		220	
Lys Lys Lys Met Glu Asn Glu Ser Ala Thr Glu Gly Glu Asp Ser Ala					
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<210> 5897

<211> 1930

<212> DNA

<213> Homo sapiens

<400> 5897

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1080

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<210> 5898

<211> 242

<212> PRT

<213> Homo sapiens

<400> 5898

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			20					25					30		
Glu	Ile	Cys	Ala	Asp	Glu	Phe	Pro	Gly	Ser	Ser	Ala	Thr	Tyr	Arg	Ile
		35					40					45			
Leu	Glu	Val	Gly	Cys	Gly	Val	Gly	Asn	Thr	Val	Phe	Pro	Ile	Leu	Gln
	50				55					60					
Thr	Asn	Asn	Asp	Pro	Gly	Leu	Phe	Val	Tyr	Cys	Cys	Asp	Phe	Ser	Ser
65				70					75					80	
Thr	Ala	Ile	Glu	Leu	Val	Gln	Thr	Asn	Ser	Glu	Tyr	Asp	Pro	Ser	Arg
				85				90					95		
Cys	Phe	Ala	Phe	Val	His	Asp	Leu	Cys	Asp	Glu	Glu	Lys	Ser	Tyr	Pro
		100					105					110			
Val	Pro	Lys	Gly	Ser	Leu	Asp	Ile	Ile	Ile	Leu	Ile	Phe	Val	Leu	Ser
		115				120						125			
Ala	Ile	Val	Pro	Asp	Lys	Met	Gln	Lys	Ala	Ile	Asn	Arg	Leu	Ser	Arg

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	165	170
Phe Tyr Val Arg Gly Asp Gly Thr Arg Val Tyr Phe Phe Thr Gln Glu		175
	180	185
Glu Leu Asp Thr Leu Phe Thr Thr Ala Gly Leu Glu Lys Val Gln Asn		190
	195	200
Leu Val Asp Arg Arg Leu Gln Val Asn Arg Gly Lys Gln Leu Thr Met		205
	210	215
Tyr Arg Val Trp Ile Gln Cys Lys Tyr Cys Lys Pro Leu Leu Ser Ser		220
225	230	235
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<210> 5899

<211> 1589

<212> DNA

<213> Homo sapiens

<400> 5899

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<210> 5900

<211> 345

<212> PRT

<213> Homo sapiens

<400> 5900

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		20						25					30		
Ile	Pro	Thr	Ile	Ile	Arg	Asp	Glu	Glu	Leu	Lys	Thr	Arg	Gly	Phe	Gly
		35					40					45			
Gly	Ile	Tyr	Gly	Val	Gly	Lys	Ala	Ala	Leu	His	Pro	Pro	Ala	Leu	Ala
	50					55					60				
Val	Leu	Ser	His	Thr	Pro	Asp	Gly	Ala	Thr	Gln	Thr	Ile	Ala	Trp	Val
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Gly	Lys	Gly	Ile	Val	Tyr	Asp	Thr	Gly	Gly	Leu	Ser	Ile	Lys	Gly	Lys
			85						90					95	
Thr	Thr	Met	Pro	Gly	Met	Lys	Arg	Asp	Cys	Gly	Gly	Ala	Ala	Ala	Val
			100					105						110	
Leu	Gly	Ala	Phe	Arg	Ala	Ala	Ile	Lys	Gln	Gly	Phe	Lys	Asp	Asn	Leu
		115						120					125		
His	Ala	Val	Phe	Cys	Leu	Ala	Glu	Asn	Ser	Val	Gly	Pro	Asn	Ala	Thr
		130						135					140		
Arg	Pro	Asp	Asp	Ile	His	Leu	Leu	Tyr	Ser	Gly	Lys	Thr	Val	Glu	Ile
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Asn	Asn	Thr	Asp	Ala	Glu	Gly	Arg	Leu	Val	Leu	Ala	Asp	Gly	Val	Ser
			165						170					175	
Tyr	Ala	Cys	Lys	Asp	Leu	Gly	Ala	Asp	Ile	Ile	Leu	Asp	Met	Ala	Thr
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Leu	Thr	Gly	Ala	Gln	Gly	Ile	Ala	Thr	Gly	Lys	Tyr	His	Ala	Ala	Val

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Leu Thr Asn Ser Ala Glu Trp Glu Ala Ala Cys Val Lys Ala Gly Arg		
210	215	220
Lys Cys Gly Asp Leu Val His Pro Leu Val Tyr Cys Pro Glu Leu His		
225	230	235
Phe Ser Glu Phe Thr Ser Ala Val Ala Asp Met Lys Asn Ser Val Ala		
245	250	255
Asp Arg Asp Asn Ser Pro Ser Ser Cys Ala Gly Leu Phe Ile Ala Ser		
260	265	270
His Ile Gly Phe Asp Trp Pro Gly Val Trp Val His Leu Asp Ile Ala		
275	280	285
Ala Pro Val His Ala Gly Glu Arg Ala Thr Gly Phe Gly Val Ala Leu		
290	295	300
Leu Leu Ala Leu Phe Gly Arg Ala Ser Glu Asp Pro Leu Leu Asn Leu		
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<210> 5901

<211> 984

<212> DNA

<213> Homo sapiens

<400> 5901

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<210> 5902

<211> 328

<212> PRT

<213> Homo sapiens

<400> 5902

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Glu	Ile	Glu	Ala	Lys	Leu	Asp	Lys	Leu	Val	Lys	Leu	Cys	Ser	Gly
	35					40						45		Met
Val	Glu	Ala	Gly	Lys	Ala	Tyr	Val	Ser	Thr	Ser	Arg	Leu	Phe	Val
	50				55					60				Ser
Gly	Val	Arg	Asp	Leu	Ser	Gln	Gln	Cys	Gln	Gly	Asp	Thr	Val	Ile
65				70					75					80
Glu	Cys	Leu	Gln	Arg	Phe	Ala	Asp	Ser	Leu	Gln	Glu	Val	Val	Asn
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His	Met	Ile	Leu	Phe	Asp	Gln	Ala	Gln	Arg	Ser	Val	Arg	Gln	Gln
			100					105					110	Leu
Gln	Ser	Phe	Val	Lys	Glu	Asp	Val	Arg	Lys	Phe	Lys	Glu	Thr	Lys
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Gln	Phe	Asp	Lys	Val	Arg	Glu	Asp	Leu	Glu	Leu	Ser	Leu	Val	Arg
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<211> 3734

<212> DNA

<213> Homo sapiens

<400> 5903

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<211> 308

<212> PRT

<213> Homo sapiens

<400> 5904

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<212> DNA

<213> Homo sapiens

<400> 5905

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<211> 215

<212> PRT

<213> Homo sapiens

<400> 5906

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<212> DNA

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<211> 454

<212> PRT

<213> Homo sapiens

<400> 5908

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 290          295          300
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<211> 4343

<212> DNA

<213> Homo sapiens

<400> 5909

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<211> 899
 <212> PRT
 <213> Homo sapiens

<400> 5910

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Val Val Ala Ile Lys Lys Met Ser Tyr Ser Gly Lys Gln Thr His Glu
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Lys Trp Gln Asp Ile Leu Lys Glu Val Lys Phe Leu Arg Gln Leu Lys
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His Pro Asn Thr Ile Glu Tyr Lys Gly Cys Tyr Leu Lys Glu His Thr
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Ala Trp Leu Val Met Glu Tyr Cys Leu Gly Ser Ala Ser Asp Leu Leu
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Glu Val His Lys Lys Pro Leu Gln Glu Val Glu Ile Ala Ala Ile Thr
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His Gly Ala Leu His Gly Leu Ala Tyr Leu His Ser His Ala Leu Ile
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Val Lys Leu Ala Asp Phe Gly Ser Ala Ser Met Ala Ser Pro Ala Asn
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Ser Phe Val Gly Thr Pro Tyr Trp Met Ala Pro Glu Val Ile Leu Ala
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Asn Ala Met Ser Ala Leu Tyr His Ile Ala Gln Asn Asp Ser Pro Thr
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Leu Asn Arg Glu Met Asp Ser Leu Gly Ser Asn His Ser Ile Pro Ser
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Glu Ser Thr Ile Asn Ser Ser Ser Ser Val Val His Lys Lys Asp His

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Ile Lys Met Gln Thr Glu Ala Gln His Glu Arg Glu Leu Gln Lys Leu

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Tyr Gln Asp Phe Asp	Trp Leu Arg Ser Lys Leu Glu	Glu Ser Gln Pro
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Val Asp Arg Phe Ser	Glu Glu Phe Val Glu Thr	Arg Arg Lys Ala Leu
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Asp Lys Phe Leu Lys	Arg Ile Thr Asp His Pro	Val Leu Ser Phe Asn
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Glu His Phe Asn Ile	Phe Leu Thr Ala Lys Asp	Leu Asn Ala Tyr Lys
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<212> DNA

<213> Homo sapiens

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 100 105 110
 Gly Tyr Ala Val His Asp Asn Trp Ile Gly Cys Asn Val Ser Ser Tyr
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 <212> PRT
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 Ser Cys Glu Ile Ala Val Thr Arg Lys Val Val Gln Val Tyr Arg Lys
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 Trp Ile Leu Gln Asp Lys Pro Val Phe Met Glu Glu Pro Asp Arg Lys
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<211> 981

<212> PRT

<213> Homo sapiens

<400> 5918

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Glu Val Thr Thr Val Trp Glu Lys Met Leu Ser Thr Pro Gly Arg Ser
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Leu Lys Phe Leu Met Phe Asp Met Gly Leu Arg Lys Gln Tyr Arg Pro
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Asp Met Ile Ile Leu Gln Ile Gln Met Tyr Gln Leu Ser Arg Leu Leu
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<211> 1252

<212> PRT

<213> Homo sapiens

<400> 5922

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Lys	Ser	Val	Ile	Ile	Trp	Thr	Ser	Lys	Leu	Glu	Gly	Ile	Leu	Lys	Tyr
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Thr	His	Asn	Asp	Ala	Ile	Gln	Cys	Val	Ser	Tyr	Asn	Pro	Ile	Thr	His
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Gln	Leu	Ala	Ser	Cys	Ser	Ser	Ser	Asp	Phe	Gly	Leu	Trp	Ser	Pro	Glu
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Gln	Lys	Ser	Val	Ser	Lys	His	Lys	Ser	Ser	Lys	Ile	Ile	Cys	Cys	
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Ser	Trp	Thr	Asn	Asp	Gly	Gln	Tyr	Leu	Ala	Leu	Gly	Met	Phe	Asn	Gly
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Ile	Ile	Ser	Ile	Arg	Asn	Lys	Asn	Gly	Glu	Glu	Lys	Val	Lys	Ile	Glu
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Gly Thr Val Gly Glu Gln Asn Ser Trp Val Trp Thr Cys Gln Ala Lys				
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Tyr Ala Tyr Arg Asp Ser Met Thr Asp Val Ile Val Gln His Leu Ile				
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Thr Glu Gln Lys Val Arg Ile Lys Cys Lys Glu Leu Val Lys Lys Ile				
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Tyr Ile Lys Val Ile Gly Gly Pro Pro Gly Arg Glu Gly Leu Leu Val				
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Gly Leu Lys Asn Gly Gln Ile Leu Lys Ile Phe Val Asp Asn Leu Phe				
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Ala Ile Val Leu Leu Lys Gln Ala Thr Ala Val Arg Cys Leu Asp Met				
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Gln Ile Ala Cys Leu Gly Val Thr Asp Thr Asp Trp Arg Glu Leu Ala				
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Met Glu Ala Leu Glu Gly Leu Asp Phe Glu Thr Ala Lys Lys Ala Phe				
	610	615		620
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5103

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Glu Phe Val Pro Val Val Val Ser Arg Leu Val Leu Arg Ser Met Ser		
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Arg Arg Asp Val Leu Ile Lys Arg Trp Pro Pro Pro Leu Arg Trp Gln		
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Tyr Phe Arg Ser Leu Leu Pro Asp Ala Ser Ile Thr Met Cys Pro Ser		
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Cys Phe Gln Val Gly Gly His Pro Gly Ser Ser His Val Leu Leu Leu		
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Ala Thr Phe Pro Leu Pro Lys Cys Pro Ser Gly Arg Arg Gly Pro Trp		
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Glu Gly Gly Ala His Pro Trp Leu Gln Val Gly Thr Glu Ala Cys Leu		
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Ser Ser Pro Leu Leu Ala Phe His Val His Leu Lys Trp Thr Ser Leu		
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<210> 5923

<211> 1989

<212> DNA

<213> Homo sapiens

<400> 5923

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<211> 146

<212> PRT

<213> Homo sapiens

<400> 5924

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Ser	Leu	Tyr	Ala	Pro	Asp	Tyr	Ser	Ser	Arg	Leu	Asp	Ile	Val	Arg	Ala
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Gly	Thr	Gly	Gln	Val	Ser	Thr	Cys	Arg	Leu	Arg	Lys	Asp	Gln	Gln	Ala
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<210> 5925

<211> 4538

<212> DNA

<213> Homo sapiens

<400> 5925

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<210> 5926

<211> 526

<212> PRT

<213> Homo sapiens

<400> 5926

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Phe	Ala	Gly	Val	Asn	Lys	Ala	Pro	Ser	Val	Ile	Thr	His	Thr	Ala	Ser
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Ala	Thr	Leu	Thr	His	Asp	Ala	Pro	Ala	Thr	Thr	Phe	Ser	Gln	Ser	Gln
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Gly	Leu	Val	Ile	Thr	Thr	His	His	Pro	Ala	Pro	Ser	Ala	Ala	Pro	Cys
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Lys Arg Arg Phe Asn Ile Lys Met Cys Phe Asp Met Leu Asn Ser Leu					
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Ile Ser Asn Asn Ser Lys Leu Thr Ser His Ala Ile Thr Leu Gln Lys					
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Glu Glu Ala Arg Arg Leu Arg Glu Glu Ile Glu Glu Leu Asn Ala Thr					
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Arg Arg Gln Phe Asp His Met Lys Asp Met Phe Asp Glu Tyr Val Lys					
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Lys Pro Leu Phe Glu Ser Phe Lys Gly Met Val Ser Thr Ser Ser Leu					
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Glu Glu Leu His Arg Thr Ala Leu Ser Trp Leu Asp Gln His Cys Ser					
465		470		475	480
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	485		490		495
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<211> 1786

<212> DNA

<213> Homo sapiens

<400> 5927

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<210> 5928

<211> 202

<212> PRT

<213> Homo sapiens

<400> 5928

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		20		25		30									
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	35			40		45									
Phe	Leu	Met	Glu	Asn	Arg	Val	Gln	Ser	Phe	Tyr	Gln	Gln	Glu	Leu	Glu
	50			55		60									
Met	Val	Glu	Ser	Leu	Leu	Ser	Leu	Ala	Asn	Gln	Pro	Val	Ile	His	Ser
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Ala	Cys	Ser	Asp	Gln	Val	Asn	Phe	Lys	Lys	Asp	Thr	Thr	Ser	Lys	Ala
		85		90		95									
Ile	His	Ser	Ile	Phe	Lys	Asn	Ala	Ile	Gln	Leu	Leu	Gln	Glu	Lys	Gly
		100		105		110									
Leu	Val	Phe	Gln	Lys	Asp	Asp	Gly	Phe	Asp	Asn	Leu	Tyr	Tyr	Val	Thr
	115			120		125									
Arg	Glu	Asp	Lys	Asp	Leu	His	Arg	Lys	Ile	His	Arg	Ile	Ile	Gln	Gln
	130			135		140									
Asp	Cys	Gln	Lys	Pro	Asn	His	Met	Glu	Lys	Gly	Cys	His	Phe	Leu	His
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		165		170		175									
Val	Leu	Gln	Gln	Val	Leu	Glu	Leu	Leu	Glu	Asp	Gln	Ser	Asp	Ile	Val
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<210> 5929

<211> 606

<212> DNA

<213> Homo sapiens

<400> 5929

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240

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606

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 <212> PRT
 <213> Homo sapiens

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 35 40 45
 Leu Gln Pro Ala Gly Ser Val Ser Ser Thr Pro Leu Ser Thr Pro Cys
 50 55 60
 Ser Ser Val Pro Ser Ser Pro Ser Phe Ser Pro Thr Glu Gln Lys Thr
 65 70 75 80
 His Leu Glu Asp Leu Tyr Trp Met Ala Ser Asn Tyr Gln Gln Met Asn
 85 90 95
 Pro Glu Ala Leu Asn Leu Thr Pro Glu Asp Ala Val Glu Ala Leu Ile
 100 105 110
 Gly Ser His Pro Val Pro Gln Pro Leu Gln Ser Phe Asp Ser Phe Arg
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 Gly Ala His His His His His His His Pro His Pro His His Ala
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<210> 5931
 <211> 478
 <212> DNA
 <213> Homo sapiens

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 120
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 180
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 300
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 360
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<210> 5932
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 <212> PRT
 <213> Homo sapiens

<400> 5932

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 Glu Arg Met Arg Asn Ser Arg Asp Arg Leu Leu Asn Arg Tyr Arg Gln
 35 40 45
 Ala Gly Ser Ser Gly Pro Gly Asn Ser Gln Asn Ser Phe Leu Val Gln
 50 55 60
 Glu Val Met Glu Glu Glu Trp Asn Ala Leu Gln Ser Val Glu Asn Cys
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 Pro Glu Asp Leu Ala Gln Leu Glu Glu Leu Ile Asp Met Ala Val Leu
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<210> 5933

<211> 1953

<212> DNA

<213> Homo sapiens

<400> 5933

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<210> 5934

<211> 314

<212> PRT

<213> Homo sapiens

<400> 5934

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			20					25					30		
Ser	Lys	Val	Arg	Glu	Gln	Leu	Glu	Gln	Glu	Leu	Glu	Glu	Leu	Thr	Ala
			35					40					45		
Ser	Leu	Phe	Glu	Glu	Ala	His	Lys	Met	Val	Arg	Glu	Ala	Asn	Met	Lys
			50			55					60				
Gln	Ala	Ala	Ser	Glu	Lys	Gln	Leu	Lys	Glu	Ala	Arg	Gly	Lys	Ile	Asp
65				70					75					80	
Met	Leu	Gln	Ala	Glu	Val	Thr	Ala	Leu	Lys	Thr	Leu	Val	Ile	Thr	Ser
			85					90					95		
Thr	Pro	Ala	Ser	Pro	Asn	Arg	Glu	Leu	His	Pro	Gln	Leu	Leu	Ser	Pro

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 115 120 125
 Ser Thr Leu Cys Pro Ala Val Cys Pro Ala Ala Gly His Thr Leu Thr
 130 135 140
 Pro Asp Arg Glu Gly Lys Glu Val Asp Thr Ile Leu Phe Ala Glu Phe
 145 150 155 160
 Gln Ala Trp Arg Glu Ser Pro Thr Leu Asp Lys Thr Cys Pro Phe Leu
 165 170 175
 Glu Arg Val Tyr Arg Glu Asp Val Gly Pro Cys Leu Asp Phe Thr Met
 180 185 190
 Gln Glu Leu Ser Val Leu Val Arg Ala Ala Val Glu Asp Asn Thr Leu
 195 200 205
 Thr Ile Glu Pro Val Ala Ser Gln Thr Leu Pro Thr Val Lys Val Ala
 210 215 220
 Glu Val Asp Cys Ser Ser Thr Asn Thr Cys Ala Leu Ser Gly Leu Thr
 225 230 235 240
 Arg Thr Cys Arg His Arg Ile Arg Leu Gly Asp Ser Lys Ser His Tyr
 245 250 255
 Tyr Ile Ser Pro Ser Ser Arg Ala Arg Ile Thr Ala Val Cys Asn Phe
 260 265 270
 Phe Thr Tyr Ile Arg Tyr Ile Gln Gln Gly Leu Val Arg Gln Asp Ala
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<210> 5935

<211> 2727

<212> DNA

<213> Homo sapiens

<400> 5935

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<210> 5936

<211> 154

<212> PRT

<213> Homo sapiens

<400> 5936

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			20					25					30		
Asp	Gln	Glu	Pro	Pro	Pro	Pro	Tyr	Gln	Glu	Gln	Val	Pro	Val	Pro	Val
		35					40					45			
Tyr	His	Pro	Thr	Pro	Ser	Gln	Thr	Arg	Leu	Ala	Thr	Gln	Leu	Thr	Glu
	50					55					60				
Glu	Glu	Gln	Ile	Arg	Ile	Ala	Gln	Arg	Ile	Gly	Leu	Ile	Gln	His	Leu
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Pro	Lys	Gly	Val	Tyr	Asp	Pro	Gly	Arg	Asp	Gly	Ser	Glu	Lys	Lys	Ile
			85						90				95		
Arg	Glu	Cys	Val	Ile	Cys	Met	Met	Asp	Phe	Val	Tyr	Gly	Asp	Pro	Ile
		100						105					110		
Arg	Phe	Leu	Pro	Cys	Met	His	Ile	Tyr	His	Leu	Asp	Cys	Ile	Asp	Asp
	115						120					125			
Trp	Leu	Met	Arg	Ser	Phe	Thr	Cys	Pro	Ser	Cys	Met	Glu	Pro	Val	Asp
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<210> 5937

<211> 1536

<212> DNA

<213> Homo sapiens

<400> 5937

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<210> 5938

<211> 406

<212> PRT

<213> Homo sapiens

<400> 5938

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Gly Lys Ser Leu Ile Val Pro Phe Lys Gly Ser Arg Val Ile Asp Ser
      35           40           45
Thr Val Leu Pro Gly Ile Leu Ile Glu Met Ser Glu Val Gln Leu Met
      50           55           60
Arg Leu Leu Pro Ile Lys Lys Ser Thr Ala Leu Lys Val Ala Leu Phe
      65           70           75           80
Cys Thr Thr Leu Ser Gly Asp Thr Ser Asp Thr Gly Glu Gly Thr Val
      85           90           95
Val Val Ser Tyr Gly Val Ser Leu Glu Asn Ala Val Leu Asp Gln Leu
      100          105          110
Leu Asn Leu Gly Arg Gln Leu Ile Ser Asp His Val Asp Leu Val Leu
      115          120          125
Cys Gln Lys Val Ile His Pro Ser Leu Lys Gln Phe Leu Asn Met His
      130          135          140
Arg Ile Ile Ala Ile Asp Arg Ile Gly Val Thr Leu Met Glu Pro Leu
      145          150          155          160
Thr Lys Met Thr Gly Thr Gln Pro Ile Gly Ser Leu Gly Ser Ile Cys
      165          170          175
Pro Asn Ser Tyr Gly Ser Val Lys Asp Val Cys Thr Ala Lys Phe Gly
      180          185          190
Ser Lys His Phe Phe His Leu Ile Pro Asn Glu Ala Thr Ile Cys Ser
      195          200          205
Leu Leu Leu Cys Asn Arg Asn Asp Thr Ala Trp Asp Glu Leu Lys Leu
      210          215          220
Thr Cys Gln Thr Ala Leu His Val Leu Gln Leu Thr Leu Lys Glu Pro
      225          230          235          240
Trp Ala Leu Leu Gly Gly Gly Cys Thr Glu Thr His Leu Ala Ala Tyr
      245          250          255
Ile Arg His Lys Thr His Asn Asp Pro Glu Ser Ile Leu Lys Asp Asp
      260          265          270
Glu Cys Thr Gln Thr Glu Leu Gln Leu Ile Ala Glu Ala Phe Cys Ser
      275          280          285
Ala Leu Glu Ser Val Val Gly Ser Leu Glu His Asp Gly Gly Glu Ile
      290          295          300
Leu Thr Asp Met Lys Tyr Gly His Leu Trp Ser Val Gln Ala Asp Ser
      305          310          315          320
Pro Cys Val Ala Asn Trp Pro Asp Leu Leu Ser Gln Cys Gly Cys Gly
      325          330          335
Leu Tyr Asn Ser Gln Glu Glu Leu Asn Trp Ser Phe Leu Arg Ser Thr
      340          345          350
Arg Arg Pro Phe Val Pro Gln Ser Cys Leu Pro His Glu Ala Val Gly
      355          360          365
Ser Ala Ser Asn Leu Thr Leu Asp Cys Leu Thr Ala Lys Leu Ser Gly
      370          375          380
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Val Ile Glu Asp Lys Asn

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405

<210> 5939

<211> 795

<212> DNA

<213> Homo sapiens

<400> 5939

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<210> 5940

<211> 96

<212> PRT

<213> Homo sapiens

<400> 5940

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20           25           30
Ala Ile Phe Lys Glu Asn Lys Arg Pro Ser Lys Glu Met Gln Val Thr
35           40           45
Ile Ser Gln Gln Leu Gly Leu Glu Leu Asn Thr Val Ser Asn Phe Phe
50           55           60
Met Asn Ala Arg Arg Arg Cys Met Asn Arg Trp Ala Glu Glu Pro Ser
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85

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<210> 5941

<211> 2590

<212> DNA

<213> Homo sapiens

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<211> 89

<212> PRT

<213> Homo sapiens

<400> 5942

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			20				25					30			
Pro	Gly	Ser	Leu	Gln	Pro	Pro	Pro	Pro	Gly	Phe	Lys	Gln	Phe	Ser	Cys

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      35              40              45
Leu Ser Leu Pro Ser Ser Trp Asp Tyr Arg Cys Leu Ser Ser Arg Leu
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65              70              75              80
Gly Trp Ser Gln Thr Pro Asp Leu Lys
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<210> 5943

<211> 781

<212> DNA

<213> Homo sapiens

<400> 5943

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<210> 5944

<211> 174

<212> PRT

<213> Homo sapiens

<400> 5944

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      20              25              30
Gly Val Ser Ser Ile Thr Lys Leu Gln Arg Gln Pro Phe Gly Val Glu

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<210> 5946
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 <212> PRT
 <213> Homo sapiens

<400> 5946
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 35 40 45
 Arg Ile Arg Arg Gly His Ala Arg Leu Ala Leu Ser Gln Asn Gln Gln
 50 55 60
 Ser Ser Gly Ala Ala Gly Pro Thr Gly Lys Asn Gly Glu Lys Ile Gln
 65 70 75 80
 Val Leu Thr Asp Lys Ile Asp Val Leu Leu Gln Gln Ile Glu Glu Leu
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<210> 5947
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 <212> DNA
 <213> Homo sapiens

<400> 5947
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 <212> PRT
 <213> Homo sapiens

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 Pro Arg Ala Ser Lys His His Tyr Ser Arg Ser Arg Ser Arg Ser Arg
 35 40 45
 Glu Arg Lys Arg Lys Ser Asp Asn Glu Gly Arg Lys His Arg Ser Arg
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4140

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<210> 5950

<211> 397

<212> PRT

<213> Homo sapiens

<400> 5950

Met	Pro	Arg	Ala	Ala	Arg	Lys	Ala	Val	Cys	Ala	Glu	Gln	Trp	Met	Phe
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Leu	Thr	Phe	Phe	Lys	Asp	Gly	Tyr	Glu	Gln	Leu	Arg	Gln	Leu	Ser	Gln
			20					25					30		
His	Ala	Met	Lys	Gly	Val	Ile	Arg	Val	Lys	Phe	Val	Asn	Asp	Leu	Gly
		35				40					45				
Val	Asp	Glu	Ala	Gly	Ile	Asp	Gln	Asp	Gly	Val	Phe	Lys	Glu	Phe	Leu
	50				55					60					
Glu	Glu	Ile	Ile	Lys	Arg	Val	Phe	Asp	Pro	Ala	Leu	Asn	Leu	Phe	Lys
65				70				75						80	
Thr	Thr	Ser	Gly	Asp	Glu	Arg	Leu	Tyr	Pro	Ser	Pro	Thr	Ser	Tyr	Ile
			85					90						95	
His	Glu	Asn	Tyr	Leu	Gln	Leu	Phe	Glu	Phe	Val	Gly	Lys	Met	Leu	Gly
		100						105					110		
Lys	Ala	Val	Tyr	Glu	Gly	Ile	Val	Val	Asp	Val	Pro	Phe	Ala	Ser	Phe
		115				120						125			
Phe	Leu	Ser	Gln	Leu	Leu	Gly	His	His	His	Ser	Val	Phe	Tyr	Ser	Ser
	130					135					140				
Val	Asp	Glu	Leu	Pro	Ser	Leu	Asp	Ser	Glu	Phe	Tyr	Lys	Asn	Leu	Thr
145				150						155				160	
Ser	Ile	Lys	Arg	Tyr	Asp	Gly	Asp	Ile	Thr	Asp	Leu	Gly	Leu	Thr	Leu
			165					170						175	
Ser	Tyr	Asp	Glu	Asp	Val	Met	Gly	Gln	Leu	Val	Cys	His	Glu	Leu	Ile
		180						185					190		
Pro	Gly	Gly	Lys	Thr	Ile	Pro	Val	Thr	Asn	Glu	Asn	Lys	Ile	Ser	Tyr
	195					200						205			
Ile	His	Leu	Met	Ala	His	Phe	Arg	Met	His	Thr	Gln	Ile	Lys	Asn	Gln

210	215	220
Thr Ala Ala Leu Ile Ser Gly Phe Arg Ser Ile Ile Lys Pro Glu Trp		
225	230	235
Ile Arg Met Phe Ser Thr Pro Glu Leu Gln Arg Leu Ile Ser Gly Asp		240
	245	250
Asn Ala Glu Ile Asp Leu Glu Asp Leu Lys Lys His Thr Val Tyr Tyr		255
	260	265
Gly Gly Phe His Gly Ser His Arg Val Ile Ile Trp Leu Trp Asp Ile		270
	275	280
Leu Ala Ser Asp Phe Thr Pro Asp Glu Arg Ala Met Phe Leu Lys Phe		285
	290	295
Val Thr Ser Cys Ser Arg Pro Pro Leu Leu Gly Phe Ala Tyr Leu Lys		300
305	310	315
Pro Pro Phe Ser Ile Arg Cys Val Glu Val Ser Asp Asp Gln Asp Thr		320
	325	330
Gly Asp Thr Leu Gly Ser Val Leu Arg Gly Phe Phe Thr Ile Arg Lys		335
	340	345
Arg Glu Pro Gly Gly Arg Leu Pro Thr Ser Ser Thr Cys Phe Asn Leu		350
	355	360
Leu Lys Leu Pro Asn Tyr Ser Lys Lys Ser Val Leu Arg Glu Lys Leu		365
	370	375
Arg Tyr Ala Ile Ser Met Asn Thr Gly Phe Glu Leu Ser		380
385	390	395

<210> 5951

<211> 1724

<212> DNA

<213> Homo sapiens

<400> 5951

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120
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180
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240
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300
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360
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420
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540
ccccgcttcc cgcccggggg gttcgcggcc ggcaggacca tgctgctgaa agagtaccgg
600
atctgcatgc cgctcaccgt agacgagtac aaaattggac agctgtacat gatcagcaaa
660
cacagccatg aacagagtga ccggggagaa ggggtggagg tcgtccagaa tgagcccttt
720

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gaggaccctc accatggcaa tgggcagttc accgagaagc ggggtgtatct caacagcaaa
 780
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 840
 aactattatc cctacacaat tacagaatac acatgttcct ttctgccgaa attctccatt
 900
 catatagaaa ccaagtatga ggacaacaaa ggaagcaatg acaccatttt cgacaatgaa
 960
 gccaaagacg tggagagaga agtttgcttt attgatattg cctgcgatga aattccagag
 1020
 cgctactaca aagaatctga ggatcctaag cacttcaagt cagagaagac aggacgggga
 1080
 cagttgaggg aaggctggag agatagtcac cagcctatca tgtgctccta caagctgggtg
 1140
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 1200
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 1260
 gacatgacaa tggatgaagt ccgagaattt gaacgagcca ctcaggaagc caccaacaag
 1320
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 1380
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 1440
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 1500
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 1560
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 1620
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 1680
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<210> 5952

<211> 378

<212> PRT

<213> Homo sapiens

<400> 5952

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Gly	Arg	Pro	Ala	Leu	Arg	Leu	Gly	Ser	Ser	Leu	Ala	Gly	Leu	Gly	Gly
			20					25					30		
Ala	Pro	Arg	Phe	Pro	Pro	Gly	Gly	Phe	Ala	Ala	Gly	Arg	Thr	Met	Leu
			35				40					45			
Leu	Lys	Glu	Tyr	Arg	Ile	Cys	Met	Pro	Leu	Thr	Val	Asp	Glu	Tyr	Lys
	50					55					60				
Ile	Gly	Gln	Leu	Tyr	Met	Ile	Ser	Lys	His	Ser	His	Glu	Gln	Ser	Asp
65					70					75				80	
Arg	Gly	Glu	Gly	Val	Glu	Val	Val	Gln	Asn	Glu	Pro	Phe	Glu	Asp	Pro
				85				90					95		
His	His	Gly	Asn	Gly	Gln	Phe	Thr	Glu	Lys	Arg	Val	Tyr	Leu	Asn	Ser

```

      100      105      110
Lys Leu Pro Ser Trp Ala Arg Ala Val Val Pro Lys Ile Phe Tyr Val
      115      120      125
Thr Glu Lys Ala Trp Asn Tyr Tyr Pro Tyr Thr Ile Thr Glu Tyr Thr
      130      135      140
Cys Ser Phe Leu Pro Lys Phe Ser Ile His Ile Glu Thr Lys Tyr Glu
145      150      155      160
Asp Asn Lys Gly Ser Asn Asp Thr Ile Phe Asp Asn Glu Ala Lys Asp
      165      170      175
Val Glu Arg Glu Val Cys Phe Ile Asp Ile Ala Cys Asp Glu Ile Pro
      180      185      190
Glu Arg Tyr Tyr Lys Glu Ser Glu Asp Pro Lys His Phe Lys Ser Glu
      195      200      205
Lys Thr Gly Arg Gly Gln Leu Arg Glu Gly Trp Arg Asp Ser His Gln
      210      215      220
Pro Ile Met Cys Ser Tyr Lys Leu Val Thr Val Lys Phe Glu Val Trp
225      230      235      240
Gly Leu Gln Thr Arg Val Glu Gln Phe Val His Lys Val Val Arg Asp
      245      250      255
Ile Leu Leu Ile Gly His Arg Gln Ala Phe Ala Trp Val Asp Glu Trp
      260      265      270
Tyr Asp Met Thr Met Asp Glu Val Arg Glu Phe Glu Arg Ala Thr Gln
      275      280      285
Glu Ala Thr Asn Lys Lys Ile Gly Ile Phe Pro Pro Ala Ile Ser Ile
      290      295      300
Ser Ser Ile Pro Leu Leu Pro Ser Ser Val Arg Ser Ala Pro Ser Ser
305      310      315      320
Ala Pro Ser Thr Pro Leu Ser Thr Asp Ala Pro Glu Phe Leu Ser Val
      325      330      335
Pro Lys Asp Arg Pro Arg Lys Lys Ser Ala Pro Glu Thr Leu Thr Leu
      340      345      350
Pro Asp Pro Glu Lys Lys Ala Thr Leu Asn Leu Pro Gly Met His Ser
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Ser Asp Lys Pro Cys Arg Pro Lys Ser Glu
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<210> 5953

<211> 777

<212> DNA

<213> Homo sapiens

<400> 5953

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120
cgggacaggc tcctaaacag gtaccgccag ctgngaagca gtgggccagg gaattctcag
180
aacagctttc tagttcaaga ggtgatggaa gaagagtgga atgctttgca gtcagtggag
240
aattgtccag aagacttggc tcagctggag gagctgatag acatggctgt gctggaggaa
300
attcaacagg agctgatcaa ccaagagcag tccatcatca gcgagtatga gaagagcttg
360

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cagtttgatg aaaagtgtct cagcatcatg ctggctgagt gggaggcaaa cccactcatc
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 tgtcctgtat gtacaaagcc tgtgatactt gggctgtgat cctctagagc cagcttggac
 480
 tcacatcatt ctatgggggtt gaagacaact cattccctct gaggagcctt gtacatacaa
 540
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 600
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 660
 agacaaactg ccttggagga gataaaccaa ttttatgtct atcatgttat acaaaaatct
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 777

<210> 5954

<211> 152

<212> PRT

<213> Homo sapiens

<400> 5954

Phe	Arg	His	Glu	Ala	Arg	Ser	Arg	Lys	Arg	Ser	Pro	Arg	Arg	Ser	Leu
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Tyr	Lys	Leu	Val	Gly	Ser	Pro	Pro	Trp	Lys	Glu	Ala	Phe	Arg	Gln	Arg
			20					25						30	
Cys	Leu	Glu	Arg	Met	Arg	Asn	Ser	Arg	Asp	Arg	Leu	Leu	Asn	Arg	Tyr
		35					40						45		
Arg	Gln	Leu	Xaa	Ser	Ser	Gly	Pro	Gly	Asn	Ser	Gln	Asn	Ser	Phe	Leu
	50					55					60				
Val	Gln	Glu	Val	Met	Glu	Glu	Glu	Trp	Asn	Ala	Leu	Gln	Ser	Val	Glu
65				70					75					80	
Asn	Cys	Pro	Glu	Asp	Leu	Ala	Gln	Leu	Glu	Glu	Leu	Ile	Asp	Met	Ala
			85					90						95	
Val	Leu	Glu	Glu	Ile	Gln	Gln	Glu	Leu	Ile	Asn	Gln	Glu	Gln	Ser	Ile
			100					105						110	
Ile	Ser	Glu	Tyr	Glu	Lys	Ser	Leu	Gln	Phe	Asp	Glu	Lys	Cys	Leu	Ser
		115					120					125			
Ile	Met	Leu	Ala	Glu	Trp	Glu	Ala	Asn	Pro	Leu	Ile	Cys	Pro	Val	Cys
	130					135					140				
Thr	Lys	Pro	Val	Ile	Leu	Gly	Leu								
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<210> 5955

<211> 1459

<212> DNA

<213> Homo sapiens

<400> 5955

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 120
 gtcagcctg tgatctgtat ccactcagca tgcacttggg cagatgattt gtctgtgtgc
 180

tacccttccc cccatattac catacatatg cacggcggga ccagcagcga cggtagcagc
 240
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 300
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 420
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 480
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 540
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 600
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 660
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 780
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 1200
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 1260
 aatgccattg ctttctattc ctacaccttt tcttaggggg ctggtcccgg ctccaccccc
 1320
 tccaagctca gtggacactg ggtctgaaag gaaggagtct tttgcttctt ttctcctttt
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 1459

<210> 5956

<211> 431

<212> PRT

<213> Homo sapiens

<400> 5956

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<211> 855

<212> DNA

<213> Homo sapiens

<400> 5957

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 120
 ctaaacaggt accgccaggc tggaagcagt gggccaggga attctcagaa cagctttcta
 180
 gttcaagagg tgatggaaga agagtggaat gctttgcagt cagtggagaa ttgtccagaa
 240
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 360
 atcattctat ggggttgaag acaactcatt ccctctgagg agccttgtag atacaagcct
 420
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 480
 tccgacatct gttcttggtc ttttgtgaca caggttgaag ggggaggaat agaaaaagac
 540
 aaactgcctt ggaggagata aaccaatttt atgtctatca tgttatataa aaatctagaa
 600
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 660
 tctggtatct tttcccccac gatattagga tgataatcat ttcaaagcac atgtctagct
 720
 tcagagtagg atttgttcac tggccaaagc ctgccatgaa actatggctt tcagcatctg
 780
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 840
 gtgctccagg gctgt
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<210> 5958

<211> 106

<212> PRT

<213> Homo sapiens

<400> 5958

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 20 25 30
 Met Arg Asn Ser Arg Asp Arg Leu Leu Asn Arg Tyr Arg Gln Ala Gly
 35 40 45
 Ser Ser Gly Pro Gly Asn Ser Gln Asn Ser Phe Leu Val Gln Glu Val
 50 55 60
 Met Glu Glu Glu Trp Asn Ala Leu Gln Ser Val Glu Asn Cys Pro Glu
 65 70 75 80
 Asp Leu Ala Gln Leu Glu Glu Leu Ile Asp Met Ala Val Leu Glu Glu
 85 90 95
 Ile Gln Gln Glu Leu Ile Asn Gln Gly Leu

100

105

<210> 5959

<211> 830

<212> DNA

<213> Homo sapiens

<400> 5959

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 120
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 180
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 240
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 300
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 360
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 420
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 480
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 660
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 780
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 830

<210> 5960

<211> 251

<212> PRT

<213> Homo sapiens

<400> 5960

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Tyr	Asp	Asp	Asn	Leu	Phe	Cys	His	Leu	Val	Asp	Glu	Val	Leu	Leu	Phe
		20						25				30			
Glu	Arg	Glu	Leu	His	Ser	Val	His	Gly	Tyr	Pro	Gly	Thr	Phe	Ala	Asn
		35				40					45				
Cys	Met	His	Ile	Leu	Ser	Glu	Thr	Cys	Phe	Gln	Arg	Trp	Val	Thr	
	50				55					60					
Gly	Glu	Arg	Lys	Phe	Ala	Leu	Gln	Lys	Met	Asp	Ser	Met	Leu	Ser	Ser
65				70				75					80		
Glu	Ala	Ala	Trp	Val	Ser	Gln	Tyr	Lys	Asp	Ile	Thr	Asp	Val	Asp	Glu

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<210> 5961
<211> 585
<212> DNA
<213> Homo sapiens
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<210> 5962
<211> 114
<212> PRT
<213> Homo sapiens
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<400> 5962

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           20           25           30
Leu Ser His Ser His Gln Pro Gly Leu Ser Gly Glu Gly Ala Gln Glu
           35           40           45
Gln Ala Arg Ile Asp Thr Gly Ile His Met Lys Arg Met Gln Thr Pro
           50           55           60
Arg His Pro Ala Leu Ser Gln Ser Leu Ile Lys Phe Gly Ile Leu Phe
65           70           75           80
Asp Pro Ser Ile Phe Phe Leu Glu Thr Gly Ser Arg Phe Ile Ala Gln
           85           90           95
Ala Glu Cys Ser Gly Tyr Ser Gln Ala Pro Leu Glu Arg Thr Ala Ala
           100           105           110
Pro Ser

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<210> 5963

<211> 1288

<212> DNA

<213> Homo sapiens

<400> 5963

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120
gaagaaaaag tgaaacgatac tgtgaaagat gctgccaaga agggccagaa ggatgtctgc
180
atagttcttg ccaaggagat gatcagggtca aggaaggctg tgagcaagct gtatgcatcc
240
aaagcacaca tgaactcagt gctcatgggg atgaagaacc agctcgcggt cttgcgagtg
300
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<210> 5964

<211> 222

<212> PRT

<213> Homo sapiens

<400> 5964

Met	Gly	Leu	Phe	Gly	Lys	Thr	Gln	Glu	Lys	Pro	Pro	Lys	Glu	Leu	Val
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			20					25					30		
Gln	Ile	Arg	Asp	Ile	Gln	Arg	Glu	Glu	Lys	Val	Lys	Arg	Ser	Val	
			35				40				45				
Lys	Asp	Ala	Ala	Lys	Lys	Gly	Gln	Lys	Asp	Val	Cys	Ile	Val	Leu	Ala
			50			55					60				
Lys	Glu	Met	Ile	Arg	Ser	Arg	Lys	Ala	Val	Ser	Lys	Leu	Tyr	Ala	Ser
65					70					75				80	
Lys	Ala	His	Met	Asn	Ser	Val	Leu	Met	Gly	Met	Lys	Asn	Gln	Leu	Ala
			85					90					95		
Val	Leu	Arg	Val	Ala	Gly	Ser	Leu	Gln	Lys	Ser	Thr	Glu	Val	Met	Lys
			100					105					110		
Ala	Met	Gln	Ser	Leu	Val	Lys	Ile	Pro	Glu	Ile	Gln	Ala	Thr	Met	Arg
			115				120					125			
Glu	Leu	Ser	Lys	Glu	Met	Met	Lys	Ala	Gly	Ile	Ile	Glu	Glu	Met	Leu
			130				135					140			
Glu	Asp	Thr	Phe	Glu	Ser	Met	Asp	Asp	Gln	Glu	Glu	Met	Glu	Glu	Glu
145					150					155				160	
Ala	Glu	Met	Glu	Ile	Asp	Arg	Ile	Leu	Phe	Glu	Ile	Thr	Ala	Gly	Ala
			165					170					175		
Leu	Gly	Lys	Ala	Pro	Ser	Lys	Val	Thr	Asp	Ala	Leu	Pro	Glu	Pro	Glu
			180					185					190		
Pro	Pro	Gly	Ala	Met	Ala	Ala	Ser	Glu	Asp	Glu	Glu	Glu	Glu	Glu	Glu
		195					200					205			
Ala	Leu	Glu	Ala	Met	Gln	Ser	Arg	Leu	Ala	Thr	Leu	Arg	Ser		
		210					215					220			

<210> 5965

<211> 1011

<212> DNA

<213> Homo sapiens

<400> 5965

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<210> 5966

<211> 233

<212> PRT

<213> Homo sapiens

<400> 5966

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 35 40 45
 Ser Arg Asp Arg Leu Leu Asn Arg Tyr Arg Gln Ala Gly Ser Ser Gly
 50 55 60
 Pro Gly Asn Ser Gln Asn Ser Phe Leu Val Gln Glu Val Met Glu Glu
 65 70 75 80
 Glu Trp Asn Ala Leu Gln Xaa Gln Trp Xaa Asn Cys Pro Glu Asp Leu

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Ala Gln Leu Glu Glu Leu Ile Asp Met Ala Val Leu Glu Glu Ile Gln
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Gln Glu Leu Ile Asn Gln Glu Gln Ser Ile Ile Ser Glu Tyr Glu Lys
      115              120              125
Ser Leu Gln Phe Asp Glu Lys Cys Leu Ser Ile Met Leu Ala Glu Trp
      130              135              140
Glu Ala Asn Pro Leu Ile Cys Pro Val Cys Thr Lys Tyr Asn Leu Arg
145              150              155              160
Ile Thr Ser Gly Val Val Val Cys Gln Cys Gly Leu Ser Ile Pro Ser
      165              170              175
His Ser Ser Glu Leu Thr Glu Gln Lys Leu Arg Ala Cys Leu Glu Gly
      180              185              190
Ser Ile Asn Glu His Ser Ala His Cys Pro His Thr Pro Glu Phe Ser
      195              200              205
Val Thr Gly Gly Thr Glu Glu Lys Ser Ser Leu Leu Met Ser Cys Leu
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<210> 5967

<211> 1806

<212> DNA

<213> Homo sapiens

<400> 5967

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720
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840

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<210> 5968

<211> 434

<212> PRT

<213> Homo sapiens

<400> 5968

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			20					25					30		
Gly	Thr	Ser	Ser	Leu	Ile	Ser	Gly	Leu	Ile	Leu	Ile	Phe	Glu	Trp	Trp
			35				40					45			
Tyr	Phe	Arg	Lys	Tyr	Gly	Thr	Ser	Phe	Ile	Glu	Gln	Val	Ser	Val	Ser
			50			55				60					
His	Leu	Arg	Pro	Leu	Leu	Gly	Gly	Val	Asp	Asn	Asn	Ser	Ser	Asn	Asn
65				70					75					80	
Ser	Asn	Ser	Ser	Asn	Gly	Asp	Ser	Asp	Ser	Asn	Arg	Gln	Ser	Val	Ser
			85				90						95		
Glu	Cys	Lys	Val	Trp	Arg	Asn	Pro	Leu	Asn	Leu	Phe	Arg	Gly	Ala	Glu

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Tyr Asn Arg Tyr Thr Trp Val Thr Gly Arg Glu Pro Leu Thr Tyr Tyr
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Asp Met Asn Leu Ser Ala Gln Asp His Gln Thr Phe Phe Thr Cys Asp
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Ser Asp His Leu Arg Pro Ala Asp Ala Ile Met Gln Lys Ala Trp Arg
145      150      155      160
Glu Arg Asn Pro Gln Ala Arg Ile Ser Ala Ala His Glu Ala Leu Glu
      165      170      175
Ile Asn Glu Thr Arg His Gln Cys Leu Gly Val His Gln Lys Lys Ala
      180      185      190
Ser Asn Val Cys Gln Lys Thr Arg Glu Asp Gln Gly Ser Lys Ala Leu
      195      200      205
Leu Glu Leu Gln Ala Tyr Ala Asp Val Gln Ala Val Leu Ala Lys Tyr
      210      215      220
Asp Asp Ile Ser Leu Pro Lys Ser Ala Thr Ile Cys Tyr Thr Ala Ala
225      230      235      240
Leu Leu Lys Ala Arg Ala Val Ser Asp Lys Phe Ser Pro Glu Ala Ala
      245      250      255
Ser Arg Arg Gly Leu Ser Thr Ala Glu Met Asn Ala Val Glu Ala Ile
      260      265      270
His Arg Ala Val Glu Phe Asn Pro His Val Pro Lys Tyr Leu Leu Glu
      275      280      285
Met Lys Ser Leu Ile Leu Pro Pro Glu His Ile Leu Lys Arg Gly Asp
      290      295      300
Ser Glu Ala Ile Ala Tyr Ala Phe Phe His Leu Ala His Trp Lys Arg
305      310      315      320
Val Glu Gly Ala Leu Asn Leu Leu His Cys Thr Trp Glu Gly Thr Phe
      325      330      335
Arg Met Ile Pro Tyr Pro Leu Glu Lys Gly His Leu Phe Tyr Pro Tyr
      340      345      350
Pro Ile Cys Thr Glu Thr Ala Asp Arg Glu Leu Leu Pro Ser Phe His
      355      360      365
Glu Val Ser Val Tyr Pro Lys Lys Glu Leu Pro Phe Phe Ile Leu Phe
      370      375      380
Thr Ala Gly Leu Cys Ser Phe Thr Ala Met Leu Ala Leu Leu Thr His
385      390      395      400
Gln Phe Pro Glu Leu Met Gly Val Phe Ala Lys Ala Val Ser Val Cys
      405      410      415
Leu Glu Gly Gly Leu Gly Glu Trp Met Gly Lys Ala Lys Gly Ile Lys
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<210> 5969

<211> 429

<212> DNA

<213> Homo sapiens

<400> 5969

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120

attgagaaga tcttgagcga ggacccccgg tggcaagatg ccaacttcgt gctgggcagc
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<210> 5970
 <211> 143
 <212> PRT
 <213> Homo sapiens

<400> 5970
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 35 40 45
 Pro Arg Trp Gln Asp Ala Asn Phe Val Leu Gly Ser Tyr Lys Thr Glu
 50 55 60
 Gln Cys Pro Lys Pro Pro Arg Leu Cys Arg Gln Gly Tyr Ala Cys Pro
 65 70 75 80
 His Tyr His Asn Ser Arg Asp Arg Arg Asn Pro Arg Arg Phe Gln
 85 90 95
 Tyr Arg Ser Thr Pro Cys Pro Ser Val Lys His Gly Asp Glu Trp Gly
 100 105 110
 Glu Pro Ser Arg Cys Asp Gly Gly Asp Gly Cys Gln Tyr Cys His Ser
 115 120 125
 Arg Thr Glu Gln Gln Phe His Pro Glu Ile Tyr Lys Ser Thr Lys
 130 135 140

<210> 5971
 <211> 565
 <212> DNA
 <213> Homo sapiens

<400> 5971
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 565

<210> 5972

<211> 104

<212> PRT

<213> Homo sapiens

<400> 5972

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Cys	Pro	Asn	Arg	Gln	His	Pro	Tyr	Phe	Ile	Asp	Gly	His	Pro	His	Phe
			20					25					30		
Arg	Asp	Ser	Ser	Leu	Leu	Tyr	Pro	His	Phe	Thr	Gly	Glu	Gly	Ile	Glu
		35				40					45				
Ala	Gln	Lys	Val	Arg	Ser	Leu	Leu	Gln	Asp	Asp	Gln	Leu	Asn	Gln	Asn
		50				55					60				
Phe	Arg	Ala	Ser	Asn	Thr	Lys	Cys	Val	Pro	Leu	Ser	Ser	Val	Ser	His
65					70					75					80
Leu	Leu	Pro	Arg	Gly	Ser	Ala	Ser	Ser	Leu	Trp	Pro	Leu	Ser	Ile	Leu
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Pro	Pro	Thr	Leu	Leu	Pro	Ala	Ser								
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<210> 5973

<211> 797

<212> DNA

<213> Homo sapiens

<400> 5973

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 180
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<210> 5974

<211> 107

<212> PRT

<213> Homo sapiens

<400> 5974

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Ser	Leu	Arg	Ile	Met	Asp	Ala	Arg	Ala	Gln	Leu	Leu	Leu	Arg	Val	Pro
			20					25					30		
His	Pro	Gly	Pro	Ser	Leu	Thr	Ser	Gly	Ala	Leu	Thr	His	Ile	Arg	Asp
		35					40					45			
Pro	His	Pro	Gly	Leu	Ser	Pro	Thr	Ser	Gly	Thr	Leu	Met	Pro	Gly	Arg
		50				55					60				
Arg	Arg	Gly	Gly	Pro	Ser	Phe	Gly	Thr	Pro	Ala	Leu	Arg	Arg	Arg	Lys
65					70					75				80	
Cys	His	Arg	Glu	Ala	Pro	Ala	Ser	Gly	Leu	Ser	Thr	Ala	Ala	Arg	Glu
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<210> 5975

<211> 2175

<212> DNA

<213> Homo sapiens

<400> 5975

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 aagcaggacc ttgcttatga acgtcagtat gaacagcaaa cctatcaggt gatccctgag
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<210> 5976

<211> 564

<212> PRT

<213> Homo sapiens

<400> 5976

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			20					25					30		
Asp	Leu	Ala	Tyr	Glu	Arg	Gln	Tyr	Glu	Gln	Gln	Thr	Tyr	Gln	Val	Ile
			35				40					45			
Pro	Glu	Val	Ile	Lys	Asn	Phe	Ile	Gln	Tyr	Phe	His	Lys	Thr	Val	Ser
			50			55					60				
Asp	Leu	Ile	Asp	Gln	Lys	Val	Tyr	Glu	Leu	Gln	Ala	Ser	Arg	Val	Ser
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Ser	Asp	Val	Ile	Asp	Gln	Lys	Val	Tyr	Glu	Ile	Gln	Asp	Ile	Tyr	Glu
			85						90				95		
Asn	Ser	Trp	Thr	Lys	Leu	Thr	Glu	Arg	Phe	Phe	Lys	Asn	Thr	Pro	Trp
			100					105					110		
Pro	Glu	Ala	Glu	Ala	Ile	Ala	Pro	Gln	Val	Gly	Asn	Asp	Ala	Val	Phe
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Leu	Ile	Leu	Tyr	Lys	Glu	Leu	Tyr	Tyr	Arg	His	Ile	Tyr	Ala	Lys	Val
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Cys	Asn	Leu	Phe	Asn	Tyr	Ile	Leu	Asn	Ala	Asp	Gly	Pro	Ala	Pro	Leu
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Glu	Leu	Pro	Asn	Gln	Trp	Leu	Trp	Asp	Ile	Ile	Asp	Glu	Phe	Ile	Tyr
			180					185					190		
Gln	Phe	Gln	Ser	Phe	Ser	Gln	Tyr	Arg	Cys	Lys	Thr	Ala	Lys	Lys	Ser
			195				200					205			
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			210			215					220				
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Ser	Leu	Val	Gly	Leu	Leu	Arg	Leu	His	Ser	Leu	Leu	Gly	Asp	Tyr	Tyr
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Gln	Ala	Ile	Lys	Val	Leu	Glu	Asn	Ile	Glu	Leu	Asn	Lys	Lys	Ser	Met
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Tyr	Ser	Arg	Val	Pro	Glu	Cys	Gln	Val	Thr	Thr	Tyr	Tyr	Tyr	Val	Gly
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Phe	Ala	Tyr	Leu	Met	Met	Arg	Arg	Tyr	Gln	Asp	Ala	Ile	Arg	Val	Phe

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385          390          395          400
Met Gln Lys Gly Asp Pro Gln Val Tyr Glu Glu Leu Phe Ser Tyr Ser
          405          410          415
Cys Pro Lys Phe Leu Ser Pro Val Val Pro Asn Tyr Asp Asn Val His
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Pro Asn Tyr His Lys Glu Pro Phe Leu Gln Gln Leu Lys Val Phe Ser
          435          440          445
Asp Glu Val Gln Gln Gln Ala Gln Leu Ser Thr Ile Arg Ser Phe Leu
          450          455          460
Lys Leu Tyr Thr Thr Met Pro Val Ala Lys Leu Ala Gly Phe Leu Asp
465          470          475          480
Leu Thr Glu Gln Glu Phe Arg Ile Gln Leu Leu Val Phe Lys His Lys
          485          490          495
Met Lys Asn Leu Val Trp Thr Ser Gly Ile Ser Ala Leu Asp Gly Glu
          500          505          510
Phe Gln Ser Ala Ser Glu Val Asp Phe Tyr Ile Asp Lys Asp Met Ile
          515          520          525
His Ile Ala Asp Thr Lys Val Ala Arg Arg Tyr Gly Asp Phe Phe Ile
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<210> 5977

<211> 2320

<212> DNA

<213> Homo sapiens

<400> 5977

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<210> 5978

<211> 77

<212> PRT

<213> Homo sapiens

<400> 5978

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			20					25					30		
Gly	Arg	Gly	Gly	Gln	Ile	Ile	Xaa	Ala	Arg	Ser	Ser	Arg	Pro	Ala	Trp
			35					40				45			
Thr	Thr	Trp	Arg	Xaa	Val	Phe	Thr	Lys	Asn	Thr	Lys	Ile	Ser	Trp	Ala
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<210> 5979

<211> 1095

<212> DNA

<213> Homo sapiens

<400> 5979

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 1095

<210> 5980
 <211> 169
 <212> PRT
 <213> Homo sapiens

<400> 5980
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 35 40 45
 Thr His Leu Val Leu Ile Cys Tyr Asp Val Met Asn Pro Thr Ser Tyr
 50 55 60
 Asp Asn Val Leu Ile Lys Trp Phe Pro Glu Val Thr His Phe Cys Arg
 65 70 75 80
 Gly Ile Pro Met Val Leu Ile Gly Cys Lys Thr Asp Leu Arg Lys Asp
 85 90 95
 Lys Glu Gln Leu Arg Lys Leu Arg Ala Ala Gln Leu Glu Pro Ile Thr
 100 105 110
 Tyr Met Gln Gly Leu Ser Ala Cys Glu Gln Ile Arg Ala Ala Leu Tyr
 115 120 125
 Leu Glu Cys Ser Ala Lys Phe Arg Glu Asn Val Glu Asp Val Phe Arg
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 145 150 155 160
 Lys Lys Arg Arg Leu Cys Leu Leu Leu
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<210> 5981
 <211> 677
 <212> DNA
 <213> Homo sapiens

<400> 5981
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<210> 5982

<211> 98

<212> PRT

<213> Homo sapiens

<400> 5982

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		20					25					30			
Pro	Arg	Ala	Pro	Leu	Pro	Arg	Ser	Ala	Arg	Arg	Pro	Ser	Lys	Ala	
		35				40					45				
Asn	Leu	His	Thr	Leu	Gly	Gln	Leu	Lys	Leu	Ser	Arg	Arg	Cys	Arg	Glu
	50				55					60					
Pro	Arg	Leu	Gly	Arg	Ala	Gly	Gln	Gln	Arg	Leu	His	Pro	Arg	Thr	Arg
65				70					75					80	
Pro	Arg	Arg	Gly	Ser	Gly	Pro	Leu	Val	Arg	Ala	Gly	Arg	Arg	Gly	Trp
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Gly Lys

<210> 5983

<211> 790

<212> DNA

<213> Homo sapiens

<400> 5983

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 120

cattgttttc cttaaattac tggtaaattt tgaaataaac agtcccaaga tgtgattatt
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<210> 5984

<211> 186

<212> PRT

<213> Homo sapiens

<400> 5984

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Leu	Gln	Glu	Ile	Lys	Thr	Ile	Gly	Tyr	Thr	Ser	Pro	Arg	Ser	Arg	Thr
			20					25					30		
Glu	Val	Asn	Arg	Gln	Cys	Pro	Gly	Glu	Lys	Glu	Pro	Val	Ser	Asp	Leu
		35					40					45			
Gln	Leu	Gly	Leu	Asp	Ala	Val	Glu	Pro	Thr	Ala	Leu	His	Lys	Thr	Leu
	50					55					60				
Glu	Thr	Pro	Ala	His	Asp	Arg	Ala	Glu	Pro	Asn	Ser	Gln	Leu	Asp	Ser
65					70					75				80	
Thr	His	Ser	Gly	Arg	Gly	Thr	Met	Tyr	Ser	Ser	Trp	Val	Lys	Ser	Pro
				85					90					95	
Asp	Arg	Thr	Gly	Val	Asn	Phe	Ser	Val	Asn	Ser	Asn	Leu	Arg	Asp	Leu
			100					105					110		
Thr	Pro	Ser	His	Gln	Leu	Glu	Val	Gly	Gly	Gly	Phe	Arg	Ile	Ser	Glu
		115					120					125			
Ser	Lys	Cys	Leu	Met	Gln	Asp	Asp	Thr	Arg	Gly	Met	Phe	Met	Glu	Thr
	130					135					140				
Thr	Val	Phe	Cys	Thr	Ser	Glu	Asp	Gly	Leu	Val	Ser	Gly	Phe	Gly	Arg
145					150					155					160
Thr	Val	Asn	Asp	Asn	Leu	Ile	Asp	Gly	Asn	Cys	Thr	Pro	Gln	Asn	Pro
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180

185

<210> 5985

<211> 737

<212> DNA

<213> Homo sapiens

<400> 5985

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<210> 5986

<211> 165

<212> PRT

<213> Homo sapiens

<400> 5986

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 35 40 45
 Gln His Val Asp Glu Ser Gly Leu Ser Leu Thr Leu Ala Lys Glu Gln
 50 55 60
 Ala Gln Ala Trp Lys Glu Val Arg Leu His Lys Thr Thr Trp Leu Arg
 65 70 75 80
 Ser Glu Ile Leu His Arg Val Ile Gln Glu Leu Leu Val Asp Tyr Tyr
 85 90 95
 Val Lys Ile Gln Asp Thr Asn Val Thr Ser Glu Asp Lys Lys Phe His

	100		105		110
Glu Thr Leu Glu Gln Arg Leu Leu Val Thr Glu Leu Met Arg Leu Leu					
	115		120		125
Gly Pro Ser Gln Glu Arg Glu Ile Pro Pro Leu Leu Gly Leu Glu Lys					
	130		135		140
Ala Asp Leu Leu Glu Leu Met Pro Leu Ser Glu Val Gly Gly Glu Ile					
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Leu Glu Pro Asn Lys					
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<210> 5987

<211> 1444

<212> DNA

<213> Homo sapiens

<400> 5987

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<212> PRT

<213> Homo sapiens

<400> 5988

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<211> 1583

<212> DNA

<213> Homo sapiens

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 Glu Ser Arg Asn Leu Trp Arg Glu Val Thr Arg Tyr Leu Arg Leu Gly
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<400> 5992

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<212> DNA

<213> Homo sapiens

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<211> 402

<212> PRT

<213> Homo sapiens

<400> 5994

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<211> 1528

<212> DNA

<213> Homo sapiens

<400> 5995

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<213> Homo sapiens

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<212> DNA

<213> Homo sapiens

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<211> 757

<212> PRT

<213> Homo sapiens

<400> 6000

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Lys	Glu	Lys	Met	Phe	Thr	Ile	Leu	Glu	Arg	Thr	Val	Thr	Thr	Arg	Ile
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Glu	Gly	Thr	Gln	Ala	Asp	Thr	Arg	Glu	Ser	Asp	Lys	Met	Trp	Leu	Val

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Arg His Leu Glu Ile Ile	Arg Lys Tyr Val Leu	Asp Asp Leu Ile Val
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Ala Lys Asn Leu Met Val	Gln Cys Phe Pro Pro	His Tyr Glu Ile Phe
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Lys Asn Leu Leu Asn Met	Tyr His Gln Ala Leu	Ser Thr Arg Met Gln
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Asp Leu Ala Ser Glu Asp	Leu Glu Ala Asn Glu	Ile Val Ser Leu Leu
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Thr Trp Val Leu Asn Thr	Tyr Thr Ser Thr Glu	Met Met Arg Asn Val
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Glu Leu Ala Pro Glu Val	Asp Val Gly Thr Leu	Glu Pro Leu Leu Ser
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Pro His Val Val Ser Glu	Leu Leu Asp Thr Tyr	Met Ser Thr Leu Thr
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Ser Asn Ile Ile Ala Trp	Leu Arg Lys Ala Leu	Glu Thr Asp Lys Lys
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Asp Trp Val Lys Glu Thr	Glu Pro Glu Ala Asp	Gln Asp Gly Tyr Tyr
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Ala Gln Leu Tyr Lys Glu	Glu His Leu Arg Asn	Arg Gln His Pro His
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Cys Tyr Val Gln Tyr Met	Ile Ala Ile Ile Asn	Asn Cys Gln Thr Phe
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Lys Glu Ser Ile Val Ser	Leu Lys Arg Lys Tyr	Leu Lys Asn Glu Val
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Asp Leu Glu Gln His Leu	Asn Glu Leu Met Thr	Lys Lys Trp Leu Leu
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Glu Ala His Arg Arg Val	Val Val Glu Tyr Leu	Arg Ala Val Met Gln
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Lys Met Val Arg Glu Ala	Glu Gln Arg Arg Phe	Leu Phe Arg Lys Leu
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Ala Ser Gly Phe Gly Glu	Asp Val Asp Gly Tyr	Cys Asp Thr Ile Val
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Ala Val Ala Glu Val Ile	Lys Leu Thr Asp Pro	Ser Leu Leu Tyr Leu
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Glu Val Ser Thr Leu Val	Ser Lys Tyr Pro Asp	Ile Arg Asp Asp His
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Ile Gly Ala Leu Leu Ala	Val Arg Gly Asp Ala	Ser Arg Asp Met Lys

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<210> 6001

<211> 2490

<212> DNA

<213> Homo sapiens

<400> 6001

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<210> 6002

<211> 263

<212> PRT

<213> Homo sapiens

<400> 6002

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Glu Asp Leu Arg Cys Pro Glu Thr Thr Ser Gln Ala Leu Pro Ala Phe
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Thr Thr Glu Ile Gln Glu Ala Ser Glu Gly Pro Gly Ala Asp Glu Val
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Ala Val Gln Pro Val Ile Gly Ile Ser Gln Arg Val Arg Met Asn Ser
145      150      155      160
Lys Glu Lys Lys Asp Leu Gly Thr Leu Gly Tyr Val Leu Gly Ile Thr
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Met Met Val Ile Ile Ile Ala Ile Gly Ala Gly Ile Ile Leu Gly Tyr
      180      185      190
Ser Tyr Lys Arg Gly Lys Asp Leu Lys Glu Gln His Asp Gln Lys Val
      195      200      205
Cys Glu Arg Glu Met Gln Arg Ile Thr Leu Pro Leu Ser Ala Phe Thr
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<210> 6003

<211> 3107

<212> DNA

<213> Homo sapiens

<400> 6003

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<210> 6004

<211> 140

<212> PRT

<213> Homo sapiens

<400> 6004

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			20					25					30		
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			50				55					60			
Ser	Pro	Arg	Gly	Glu	Arg	Gly	Ser	Gly	Pro	His	Ala	Val	Gln	Gly	Val
					70					75				80	
Ala	Leu	Pro	Xaa	Arg	Gly	Ser	Pro	Arg	Gly	Pro	Gly	Pro	Arg	Ala	Pro
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<210> 6005
 <211> 1735
 <212> DNA
 <213> Homo sapiens

<400> 6005
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<210> 6006

<211> 200

<212> PRT

<213> Homo sapiens

<400> 6006

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Lys	Gly	Gln	Lys	Gly	Asp	Pro	Gly	Glu	Pro	Gly	Pro	Ala	Gly	Leu	Lys
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Gly	Glu	Ala	Gly	Glu	Met	Gly	Leu	Ser	Gly	Leu	Pro	Gly	Ala	Asp	Gly
			35				40					45			
Leu	Lys	Gly	Glu	Lys	Gly	Glu	Ser	Ala	Ser	Gln	Pro	Thr	Gly	Glu	Pro
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Pro	Gly	Pro	Val	Gly	Pro	Pro	Gly	Leu	Ile	Gly	Leu	Pro	Gly	Thr	Lys
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Gly	Glu	Lys	Gly	Arg	Pro	Gly	Glu	Pro	Gly	Leu	Asp	Gly	Phe	Pro	Gly
			130				135				140				
Pro	Arg	Gly	Glu	Lys	Gly	Asp	Arg	Ser	Glu	Arg	Gly	Glu	Lys	Gly	Glu
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Arg	Gly	Val	Pro	Gly	Arg	Lys	Gly	Val	Lys	Gly	Gln	Lys	Gly	Glu	Pro
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Gly	Pro	Pro	Gly	Leu	Asp	Gln	Pro	Cys	Pro	Val	Gly	Pro	Asp	Gly	Leu
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<210> 6007

<211> 693

<212> DNA

<213> Homo sapiens

<400> 6007

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<210> 6008

<211> 214

<212> PRT

<213> Homo sapiens

<400> 6008

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			20					25					30		
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Ser	Ser	Thr	Asn	Thr	Val	Gly	Ala	Thr	Val	Asn	Ser	Gln	Ala	Ala	Gln
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Ala	Gln	Pro	Pro	Ala	Met	Thr	Ser	Ser	Arg	Lys	Gly	Thr	Phe	Thr	Asp
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Asp	Leu	His	Lys	Leu	Val	Asp	Asn	Trp	Ala	Arg	Asp	Ala	Met	Asn	Leu
			85					90					95		
Ser	Gly	Arg	Arg	Gly	Ser	Lys	Gly	His	Met	Asn	Tyr	Glu	Gly	Pro	Gly
			100				105					110			
Met	Ala	Arg	Lys	Phe	Ser	Ala	Pro	Gly	Gln	Leu	Cys	Ile	Ser	Met	Thr
		115				120					125				
Ser	Asn	Leu	Gly	Gly	Ser	Ala	Pro	Ile	Ser	Ala	Ala	Ser	Ala	Thr	Ser
	130					135					140				
Leu	Gly	His	Phe	Thr	Lys	Ser	Met	Cys	Pro	Pro	Gln	Gln	Tyr	Gly	Phe
145				150				155						160	
Pro	Ala	Thr	Pro	Phe	Gly	Ala	Gln	Trp	Ser	Gly	Thr	Gly	Gly	Pro	Ala

5186

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<210> 6010

<211> 468

<212> PRT

<213> Homo sapiens

<400> 6010

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			20					25					30		
Asp	Thr	Val	Tyr	Asp	Val	Val	Val	Ser	Gly	Gly	Gly	Leu	Val	Gly	Ala
		35					40					45			
Ala	Met	Ala	Cys	Ala	Leu	Gly	Tyr	Asp	Ile	His	Phe	His	Asp	Lys	Lys
	50					55					60				
Ile	Leu	Leu	Leu	Glu	Ala	Gly	Pro	Lys	Lys	Val	Leu	Glu	Lys	Leu	Ser
65				70						75				80	
Glu	Thr	Tyr	Ser	Asn	Arg	Val	Ser	Ser	Ile	Ser	Pro	Gly	Ser	Ala	Thr
			85					90					95		
Leu	Leu	Ser	Ser	Phe	Gly	Ala	Trp	Asp	His	Ile	Cys	Asn	Met	Arg	Tyr
			100					105					110		
Arg	Ala	Phe	Arg	Arg	Met	Gln	Val	Trp	Asp	Ala	Cys	Ser	Glu	Ala	Leu
	115					120					125				
Ile	Met	Phe	Asp	Lys	Asp	Asn	Leu	Asp	Asp	Met	Gly	Tyr	Ile	Val	Glu
	130				135						140				
Asn	Asp	Val	Ile	Met	His	Ala	Leu	Thr	Lys	Gln	Leu	Glu	Ala	Val	Ser
145				150						155				160	
Asp	Arg	Val	Thr	Val	Leu	Tyr	Arg	Ser	Lys	Ala	Ile	Arg	Tyr	Thr	Trp
			165						170					175	
Pro	Cys	Pro	Phe	Pro	Met	Ala	Asp	Ser	Ser	Pro	Trp	Val	His	Ile	Thr
			180					185					190		
Leu	Gly	Asp	Gly	Ser	Thr	Phe	Gln	Thr	Lys	Leu	Leu	Ile	Gly	Ala	Asp
		195				200						205			
Gly	His	Asn	Ser	Gly	Val	Arg	Gln	Ala	Val	Gly	Ile	Gln	Asn	Val	Ser
	210				215						220				
Trp	Asn	Tyr	Asp	Gln	Ser	Ala	Val	Val	Ala	Thr	Leu	His	Leu	Ser	Glu
225				230						235				240	
Ala	Thr	Glu	Asn	Asn	Val	Ala	Trp	Gln	Arg	Phe	Leu	Pro	Ser	Gly	Pro
			245					250						255	
Ile	Ala	Leu	Leu	Pro	Leu	Ser	Asp	Thr	Leu	Ser	Ser	Leu	Val	Trp	Ser

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 275 280 285
 Phe Val Asp Ala Val Asn Ser Ala Phe Trp Ser Asp Ala Asp His Thr
 290 295 300
 Asp Phe Ile Asp Thr Ala Gly Ala Met Leu Gln Tyr Pro Val Ser Leu
 305 310 315 320
 Leu Lys Pro Thr Lys Val Ser Ala Arg Gln Leu Pro Pro Ser Val Pro
 325 330 335
 Trp Val Asp Ala Lys Ser Arg Val Leu Phe Pro Leu Gly Leu Gly His
 340 345 350
 Ala Ala Glu Tyr Val Arg Pro Arg Val Ala Leu Ile Gly Asp Ala Ala
 355 360 365
 His Arg Val His Pro Leu Ala Gly Gln Gly Val Asn Met Gly Phe Gly
 370 375 380
 Asp Ile Ser Ser Leu Ala His His Leu Ser Thr Ala Ala Phe Asn Gly
 385 390 395 400
 Lys Asp Leu Gly Ser Val Ser His Leu Thr Gly Tyr Glu Thr Glu Arg
 405 410 415
 Gln Arg His Asn Thr Ala Leu Leu Ala Ala Thr Asp Leu Leu Lys Arg
 420 425 430
 Leu Tyr Ser Thr Ser Ala Ser Pro Leu Val Leu Leu Arg Thr Trp Gly
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 Phe Ala Ser Lys
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<210> 6011

<211> 1331

<212> DNA

<213> Homo sapiens

<400> 6011

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<210> 6012

<211> 219

<212> PRT

<213> Homo sapiens

<400> 6012

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Val	Phe	Ser	Lys	Gly	Val	Arg	Glu	Val	Glu	Arg	Val	Leu	Gln	Leu	Pro
			20					25					30		
Lys	Glu	Pro	Gly	Asp	Ser	Ala	Gln	Phe	Thr	Lys	Ala	Ile	Ala	Ile	Ile
			35					40					45		
Phe	Pro	Phe	Leu	Tyr	Leu	Leu	Glu	Lys	Val	Glu	Cys	Thr	Pro	Ser	Gln
			50				55				60				
Glu	His	Leu	Lys	His	Gln	Thr	Val	Tyr	Arg	Leu	Leu	Lys	Cys	Ala	Pro
65					70					75					80
Arg	Gly	Lys	Asn	Gly	Phe	Thr	Pro	Leu	His	Met	Ala	Val	Asp	Lys	Asp
			85						90					95	
Thr	Thr	Asn	Val	Gly	Arg	Tyr	Pro	Val	Gly	Arg	Phe	Pro	Ser	Leu	His
			100						105					110	
Val	Val	Lys	Val	Leu	Leu	Asp	Cys	Gly	Ala	Asp	Pro	Asp	Ser	Arg	Asp
			115					120					125		
Phe	Asp	Asn	Asn	Thr	Pro	Leu	His	Ile	Ala	Ala	Gln	Asn	Asn	Cys	Pro
			130				135					140			
Ala	Ile	Met	Asn	Ala	Leu	Ile	Glu	Ala	Gly	Ala	His	Met	Asp	Ala	Thr
145					150					155					160
Asn	Ala	Phe	Lys	Lys	Thr	Ala	Tyr	Glu	Leu	Leu	Asp	Glu	Lys	Leu	Leu

				165					170					175	
Ala	Arg	Gly	Thr	Met	Gln	Pro	Phe	Asn	Tyr	Val	Thr	Leu	Gln	Cys	Leu
			180					185					190		
Ala	Ala	Arg	Ala	Leu	Asp	Lys	Asn	Lys	Ile	Pro	Tyr	Lys	Gly	Phe	Ile
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<210> 6013

<211> 2204

<212> DNA

<213> Homo sapiens

<400> 6013

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<210> 6014

<211> 182

<212> PRT

<213> Homo sapiens

<400> 6014

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Ala	Tyr	Thr	Asp	Ala	Ala	Ser	Leu	Glu	Val	His	Leu	Ser	Thr	His	Thr
			20					25					30		
Val	Lys	His	Ala	Lys	Val	Tyr	Thr	Cys	Thr	Ile	Cys	Ser	Arg	Ala	Tyr
		35				40					45				
Thr	Ser	Glu	Thr	Tyr	Leu	Met	Lys	His	Met	Arg	Lys	His	Asn	Pro	Pro
	50				55				60						
Asp	Leu	Gln	Gln	Gln	Val	Gln	Ala	Ala	Ala	Ala	Ala	Ala	Val	Ala	
65				70					75				80		
Gln	Ala	Gln	Ala	Gln	Ala	Gln	Ala	Gln	Ala	Gln	Ala	Gln	Ala	Gln	Ala
			85			90						95			
Gln	Ala	Gln	Ala	Gln	Ala	Ser	Gln	Ala	Ser	Gln	Gln	Gln	Gln	Gln	Gln

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Gln Gln Gln Gln Gln Gln Gln Gln Gln Pro Pro Pro His Phe Gln Ser
          115          120          125
Pro Gly Ala Ala Pro Gln Gly Gly Gly Gly Gly Asp Ser Asn Pro Asn
          130          135          140
Pro Pro Pro Gln Cys Ser Phe Asp Leu Thr Pro Tyr Lys Thr Ala Glu
145          150          155          160
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<210> 6015

<211> 612

<212> DNA

<213> Homo sapiens

<400> 6015

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180
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240
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480
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<210> 6016

<211> 99

<212> PRT

<213> Homo sapiens

<400> 6016

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Pro Arg Ser Pro Glu Arg Leu Pro Ala Ser Gln Gly Ile Ser Arg Gly
          20          25          30
Arg Cys Lys Leu Asn Asn Asn Ser Trp Ser Gly Leu Thr Cys Pro Thr
          35          40          45
Leu Ser Met Ser Cys Asn Gln Asn Lys Leu Asp Ser Pro Gly Arg Ala

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50		55		60
Ser His Gly Ser Ser Leu Pro Phe Asn Gln Asp Ser Gln Lys Pro Ala				
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Phe Tyr Asn Ile Phe Leu Lys Lys Ser His Ser Phe Gln Ser Leu Leu				
	85	90	95	
Gln Tyr Ile				

<210> 6017
 <211> 2091
 <212> DNA
 <213> Homo sapiens

<400> 6017
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<210> 6018

<211> 537

<212> PRT

<213> Homo sapiens

<400> 6018

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 35 40 45
 Asn Ser Gln Gln Ala Ala Asn Val Leu Ser Gly Ala Cys Gly Leu Gln
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 Arg Gly Asp Arg Val Ala Val Met Leu Pro Arg Val Pro Glu Trp Trp
 65 70 75 80
 Leu Val Ile Leu Gly Cys Ile Arg Ala Gly Leu Ile Phe Met Pro Gly
 85 90 95
 Thr Ile Gln Met Lys Ser Thr Asp Ile Leu Tyr Arg Leu Gln Met Ser
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<210> 6019
<211> 3002
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<212> DNA

<213> Homo sapiens

<400> 6019

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<211> 387

<212> PRT

<213> Homo sapiens

<400> 6020

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<211> 3145

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<213> Homo sapiens

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<211> 1014

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<211> 496

<212> PRT

<213> Homo sapiens

<400> 6026

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Thr	Ser	Asp	Asn	Gly	Lys	Asp	Gly	Leu	Ala	Tyr	Ser	Ala	Leu	Leu	Lys
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Glu	Val	Phe	Arg	Thr	Arg	Ile	Glu	Ala	Ala	Thr	Gln	Met	Glu	Ser	Gly
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<213> Homo sapiens

<400> 6030

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<212> PRT

<213> Homo sapiens

<400> 6032

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<211> 5157

<212> DNA

<213> Homo sapiens

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<211> 1096

<212> PRT

<213> Homo sapiens

<400> 6034

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<213> Homo sapiens

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 acagttctgg gagtgtgacc tgtaagcctc ctgtagggca gtgccaggcc ttgattgccc
 3720
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 agtgtgcatc acggtaaaag agctgagggc tctcttcagg gagcagccca tttaggtctc
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 3900
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 3910

<210> 6038

<211> 214

<212> PRT

<213> Homo sapiens

<400> 6038

Lys	Gln	Pro	Xaa	Arg	Ser	Leu	Ala	Pro	Ala	Leu	Pro	Gly	Ala	Leu	Ser
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Ile	Thr	Ala	Leu	Cys	Thr	Ala	Leu	Ala	Glu	Pro	Ala	Trp	Leu	His	Ile
			20					25					30		
His	Gly	Gly	Thr	Cys	Ser	Arg	Gln	Glu	Leu	Gly	Val	Ser	Asp	Val	Leu
		35					40					45			
Gly	Tyr	Val	His	Pro	Asp	Leu	Leu	Lys	Asp	Phe	Cys	Met	Asn	Pro	Gln
	50					55					60				
Thr	Val	Leu	Leu	Leu	Arg	Val	Ile	Ala	Ala	Phe	Cys	Phe	Leu	Gly	Ile
65					70					75				80	
Leu	Cys	Ser	Leu	Ser	Ala	Phe	Leu	Leu	Asp	Val	Phe	Gly	Pro	Lys	His
				85					90					95	
Pro	Ala	Leu	Lys	Ile	Thr	Arg	Arg	Tyr	Ala	Phe	Ala	His	Ile	Leu	Thr
			100					105					110		
Val	Leu	Gln	Cys	Ala	Thr	Val	Ile	Gly	Phe	Ser	Tyr	Trp	Ala	Ser	Glu
		115					120					125			
Leu	Ile	Leu	Ala	Gln	Gln	Gln	Gln	His	Lys	Lys	Tyr	His	Gly	Ser	Gln
	130					135					140				
Val	Tyr	Val	Thr	Phe	Ala	Val	Ser	Phe	Tyr	Leu	Val	Ala	Gly	Ala	Gly
145				150						155				160	
Gly	Ala	Ser	Ile	Leu	Ala	Thr	Ala	Ala	Asn	Leu	Leu	Arg	His	Tyr	Pro
			165					170					175		
Thr	Glu	Glu	Glu	Glu	Gln	Ala	Leu	Glu	Leu	Leu	Ser	Glu	Met	Glu	Glu
			180					185				190			
Asn	Glu	Pro	Tyr	Pro	Ala	Glu	Tyr	Glu	Val	Ile	Asn	Gln	Phe	Gln	Pro
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			210												

<210> 6039
 <211> 1130
 <212> DNA
 <213> Homo sapiens

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 120
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 180
 ccggccggtg agggccaggc tgggaggcta cccctgctgc cctgcgccc tgcctacgtg
 240
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 300
 ctgggcgccc agcacgcgtt gctgctggac gctgctggcc aggtgttctc ctggggcggg
 360
 ggcaggcatg gacagctggg ccatgggacc ctggaggcag agctggagcc acggctgttg
 420
 gaggcgttgc agggcctagt catggctgag gtggccgcgg ggggctggca ttctgtgtg
 480
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 540
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 600
 gaagatggtt ctcaggtgaa gagaacgggt ggggctgagg atggagcccc tgcccccttc
 660
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 720
 gccagctgtg gatcccgga cacagctgtg gtgacacgaa caggggagct ctacacctgg
 780
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 840
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 900
 aacacctacg tgtatgtgt ggagaaagg aagagctgac atgtgtacgt atatgtatat
 960
 gcaacacctg tgagaccccc attcaggtca aggaaaacca ttgcctgcac cccaagggcc
 1020
 ccatatttgc ccctcccat cacagtctg cccttcaccc tcaagcacgg tcctaaactt
 1080
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 1130

<210> 6040
 <211> 312
 <212> PRT
 <213> Homo sapiens

<400> 6040
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20 25 30
 Gln Val Trp Ala Ala Glu Ser Ala Leu Arg Gly Glu Pro Leu Trp Ala
 35 40 45
 Gln Asn Val Val Pro Glu Ala Glu Gly Glu Asp Asp Pro Ala Gly Glu
 50 55 60
 Ala Gln Ala Gly Arg Leu Pro Leu Leu Pro Cys Ala Arg Ala Tyr Val
 65 70 75 80
 Ser Pro Arg Ala Pro Phe Tyr Arg Pro Leu Ala Pro Glu Leu Arg Ala
 85 90 95
 Arg Gln Leu Glu Leu Gly Ala Glu His Ala Leu Leu Leu Asp Ala Ala
 100 105 110
 Gly Gln Val Phe Ser Trp Gly Gly Gly Arg His Gly Gln Leu Gly His
 115 120 125
 Gly Thr Leu Glu Ala Glu Leu Glu Pro Arg Leu Leu Glu Ala Leu Gln
 130 135 140
 Gly Leu Val Met Ala Glu Val Ala Ala Gly Gly Trp His Ser Val Cys
 145 150 155 160
 Val Ser Glu Thr Gly Asp Ile Tyr Ile Trp Gly Trp Asn Glu Ser Gly
 165 170 175
 Gln Leu Ala Leu Pro Thr Arg Asn Leu Ala Glu Asp Gly Glu Thr Val
 180 185 190
 Ala Arg Glu Ala Thr Glu Leu Asn Glu Asp Gly Ser Gln Val Lys Arg
 195 200 205
 Thr Gly Gly Ala Glu Asp Gly Ala Pro Ala Pro Phe Ile Ala Val Gln
 210 215 220
 Pro Phe Pro Ala Leu Leu Asp Leu Pro Met Gly Ser Asp Ala Val Lys
 225 230 235 240
 Ala Ser Cys Gly Ser Arg His Thr Ala Val Val Thr Arg Thr Gly Glu
 245 250 255
 Leu Tyr Thr Trp Gly Trp Gly Lys Tyr Gly Gln Leu Gly His Glu Asp
 260 265 270
 Thr Thr Ser Leu Asp Arg Pro Arg Arg Val Glu Tyr Phe Val Asp Lys
 275 280 285
 Gln Leu Gln Val Lys Ala Val Thr Cys Gly Pro Trp Asn Thr Tyr Val
 290 295 300
 Tyr Ala Val Glu Lys Gly Lys Ser
 305 310

<210> 6041

<211> 291

<212> DNA

<213> Homo sapiens

<400> 6041

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120

cggttgagc agcaaaagca gcagataatg gcagctttaa actcccagac tgccgtgcag
180

ttccagcagt atgcagccca acagtatcca gggaactacg aacagcagca aattctcatc
240

cgccagttgc aggagcaaca ctatcagcag tacatgcagc agttgtatca c
291

<210> 6042
 <211> 97
 <212> PRT
 <213> Homo sapiens

<400> 6042
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 20 25 30
 Arg Arg Ile Glu Glu Glu Arg Leu Arg Leu Glu Gln Gln Lys Gln Gln
 35 40 45
 Ile Met Ala Ala Leu Asn Ser Gln Thr Ala Val Gln Phe Gln Gln Tyr
 50 55 60
 Ala Ala Gln Gln Tyr Pro Gly Asn Tyr Glu Gln Gln Gln Ile Leu Ile
 65 70 75 80
 Arg Gln Leu Gln Glu Gln His Tyr Gln Gln Tyr Met Gln Gln Leu Tyr
 85 90 95
 His

<210> 6043
 <211> 558
 <212> DNA
 <213> Homo sapiens

<400> 6043
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 120
 ttcaagggtgt cttgtacaac ccaactgggga aacaggatct gggaccggtg cgggcacatt
 180
 ctcttggtccc agcacagggg cggtgccacc cacattcggc ccgggtcttg cctaatacat
 240
 gtttttggtaa acactcggtc agagcaccct ctgttttttc cagtcccgaa gctccccgca
 300
 ggaatccaca cccccgcccc acccctctcg ggacacggat tcaatgtccc tgggtgggtca
 360
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 420
 tggttctcccc cgctgacgtt gctcagataa cagtctgca attccatggg ggtggcggca
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 558

<210> 6044
 <211> 152
 <212> PRT
 <213> Homo sapiens

<400> 6044

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Cys Tyr Leu Ser Asn Val Asp Gly Gly Glu His Pro Cys Pro Arg Leu
      20           25           30
Lys Ile Ala Pro Leu Glu Ser His His Arg Pro Lys Arg Pro Asp Asp
      35           40           45
Pro Pro Gly Thr Leu Asn Pro Cys Pro Glu Arg Gly Gly Ala Gly Val
      50           55           60
Trp Ile Pro Ala Gly Ser Phe Gly Thr Gly Lys Asn Arg Gly Cys Ser
65           70           75           80
Asp Arg Val Phe Thr Lys Thr Cys Ile Arg Gln Asp Pro Gly Arg Met
      85           90           95
Trp Val Ala Pro Pro Leu Cys Trp Ala Arg Arg Met Cys Pro His Arg
      100          105          110
Ser Gln Ile Leu Phe Pro Gln Trp Val Val Gln Asp Thr Leu Asn Phe
      115          120          125
Cys Met Asn Trp Asp Ile Gln Asn Ser Leu Glu Gln Pro Pro Pro Ser
      130          135          140
Thr Leu Cys Leu Asp Ile Ser Tyr
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<210> 6045

<211> 1916

<212> DNA

<213> Homo sapiens

<400> 6045

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180
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240
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300
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420
agcagtaact tggtattct gtctggccaa gtggttgaac actttgatct ggagttccga
480
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540
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660
gagatgcccg cagagggcaa ggcagagcgc aagccccatg actgtgagtc ctctactgtt
720
agtgaggaag actacttcag cagccacagg gacgagctcc agagcagaaa ggccattgac
780

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gctgccactc aaacagagcc aggagaggag atgccagggc tgagtgtgag tgaggtggga
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 960
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 1020
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 1080
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 1916

<210> 6046

<211> 457

<212> PRT

<213> Homo sapiens

<400> 6046

Thr	Arg	Val	Glu	Thr	His	Phe	Gln	Pro	Arg	Gly	Ala	Gly	Glu	Gly	Gly
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Pro	Tyr	Gly	Cys	Lys	Asp	Ala	Leu	Arg	Gln	Gln	Leu	Arg	Ser	Ala	Arg
		20					25					30			
Glu	Val	Ile	Ala	Val	Val	Met	Asp	Val	Phe	Thr	Asp	Ile	Asp	Ile	Phe
	35					40				45					
Arg	Asp	Leu	Gln	Glu	Ile	Cys	Arg	Lys	Gln	Gly	Val	Ala	Val	Tyr	Ile
	50				55					60					
Leu	Leu	Asp	Gln	Ala	Leu	Leu	Ser	Gln	Phe	Leu	Asp	Met	Cys	Met	Asp

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65          70          75          80
Leu Lys Val His Pro Glu Gln Glu Lys Leu Met Thr Val Arg Thr Ile
      85          90          95
Thr Gly Asn Ile Tyr Tyr Ala Arg Ser Gly Thr Lys Ile Ile Gly Lys
      100        105        110
Val His Glu Lys Phe Thr Leu Ile Asp Gly Ile Arg Val Ala Thr Gly
      115        120        125
Ser Tyr Ser Phe Thr Trp Thr Asp Gly Lys Leu Asn Ser Ser Asn Leu
      130        135        140
Val Ile Leu Ser Gly Gln Val Val Glu His Phe Asp Leu Glu Phe Arg
145          150          155          160
Ile Leu Tyr Ala Gln Ser Lys Pro Ile Ser Pro Lys Leu Leu Ser His
      165        170        175
Phe Gln Ser Ser Asn Lys Phe Asp His Leu Thr Asn Arg Lys Pro Gln
      180        185        190
Ser Lys Glu Leu Thr Leu Gly Asn Leu Leu Arg Met Arg Leu Ala Arg
      195        200        205
Leu Ser Ser Thr Pro Arg Lys Ala Asp Leu Asp Pro Glu Met Pro Ala
      210        215        220
Glu Gly Lys Ala Glu Arg Lys Pro His Asp Cys Glu Ser Ser Thr Val
225          230          235          240
Ser Glu Glu Asp Tyr Phe Ser Ser His Arg Asp Glu Leu Gln Ser Arg
      245        250        255
Lys Ala Ile Asp Ala Ala Thr Gln Thr Glu Pro Gly Glu Glu Met Pro
      260        265        270
Gly Leu Ser Val Ser Glu Val Gly Thr Gln Thr Ser Ile Thr Thr Ala
      275        280        285
Cys Ala Gly Thr Gln Thr Ala Val Ile Thr Arg Ile Ala Ser Ser Gln
      290        295        300
Thr Thr Ile Trp Ser Arg Ser Thr Thr Thr Gln Thr Asp Met Asp Glu
305          310          315          320
Asn Ile Leu Phe Pro Arg Gly Thr Gln Ser Thr Glu Gly Ser Pro Val
      325        330        335
Ser Lys Met Ser Val Ser Arg Ser Ser Leu Lys Ser Ser Ser Ser
      340        345        350
Val Ser Ser Gln Gly Ser Val Ala Ser Ser Thr Gly Ser Pro Ala Ser
      355        360        365
Ile Arg Thr Thr Asp Phe His Asn Pro Gly Tyr Pro Lys Tyr Leu Gly
      370        375        380
Thr Pro His Leu Glu Leu Tyr Leu Ser Asp Ser Leu Arg Asn Leu Asn
385          390          395          400
Lys Glu Arg Gln Phe His Phe Ala Gly Ile Arg Ser Arg Leu Asn His
      405        410        415
Met Leu Ala Met Leu Ser Arg Arg Thr Leu Phe Thr Glu Asn His Leu
      420        425        430
Gly Leu His Ser Gly Asn Phe Ser Arg Val Asn Leu Leu Ala Val Arg
      435        440        445
Asp Val Ala Leu Tyr Pro Ser Tyr Gln
      450        455

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<210> 6047

<211> 773

<212> DNA

<213> Homo sapiens

<400> 6047

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 120
 gatgggaaat gggggatctc atcgcttggt agtagaggag actttggggg gaaagtgatg
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<210> 6048

<211> 129

<212> PRT

<213> Homo sapiens

<400> 6048

Met Val Lys Arg Val Ser Glu Met Ser Asp Lys Lys Gln Leu Arg Ser
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 Gly Thr Thr Leu Glu Lys Ser Cys Leu His His Cys Ser Gly Gly Gly
 35 40 45
 His Leu Pro Ser Ala Cys Leu Gly Ala Arg Arg Ser Ser Ser Leu Leu
 50 55 60
 Gly Tyr Gly Ser Cys Arg Asp Thr Gln Ser Trp Thr Pro Asp Pro Leu
 65 70 75 80
 Pro His Pro Pro Ser Leu Ser Pro Gln Ser Leu Leu Tyr Ser Gln Ala
 85 90 95
 Met Arg Ser Pro Ile Ser His Gln Glu Leu Thr Arg Pro Leu Gly Lys
 100 105 110
 Glu Ala Ala Arg Arg Arg Cys Gly His Thr Val Ala Leu Ser Ala Arg
 115 120 125
 Asp

<210> 6049
 <211> 479
 <212> DNA
 <213> Homo sapiens

<400> 6049
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 180
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 360
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<210> 6050
 <211> 159
 <212> PRT
 <213> Homo sapiens

<400> 6050
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 Ala Lys Lys Arg Lys Leu Asn Ser Ser Ser Ser Ser Ser Asn Ser
 35 40 45
 Ser Asn Glu Arg Glu Asp Phe Asp Ser Thr Ser Ser Ser Ser Thr
 50 55 60
 Pro Pro Leu Gln Pro Arg Asp Ser Ala Ser Pro Ser Thr Ser Ser Phe
 65 70 75 80
 Cys Leu Gly Val Ser Val Ala Ala Ser Ser His Val Pro Ile Gln Lys
 85 90 95
 Lys Leu Arg Phe Glu Asp Thr Leu Glu Phe Val Gly Phe Asp Ala Lys
 100 105 110
 Met Ala Glu Glu Ser Ser Ser Ser Ser Ser Ser Ser Pro Thr Ala
 115 120 125
 Ala Thr Ser Gln Glu Gln Gln Leu Lys Asn Lys Ser Ile Leu Ile Ser
 130 135 140
 Ser Val Gly Ser Val His His Ala Asp Gly Leu Ala Glu Ser Ser
 145 150 155

<210> 6051
 <211> 2404
 <212> DNA
 <213> Homo sapiens

<400> 6051
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240
cgctaccagg aagttttagt gcaacgtagc aagcgcacac agttagaaga gattcaacag
300
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360
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420
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gttaatctca aaaggcagca gctgagacat cctgaaatgg tgaccacaga gagctaata
1560

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 1680
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<212> PRT

<213> Homo sapiens

<400> 6052

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<213> Homo sapiens

<400> 6054

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<211> 500

<212> PRT

<213> Homo sapiens

<400> 6058

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 Arg Thr His Gly Arg Asn Gly Thr Glu Asn Ile Asn His Arg Gly Gly
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 Tyr His Gly Gly Ser Ser Arg Ser Arg Ser Ser Ile Phe His Ala Gly
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 Lys Ser Gln Gly Leu His Glu Asn Ile Pro Asp Asn Glu Thr Gly
 115 120 125
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 195 200 205
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 245 250 255
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 Val Gly Asn Phe Asn Ala Phe Lys Ser Thr Ala Lys Asn Phe Ser Pro
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<210> 6059

<211> 1442

<212> DNA

<213> Homo sapiens

<400> 6059

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<210> 6060

<211> 313

<212> PRT

<213> Homo sapiens

<400> 6060

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			20					25					30		
Ile	Ser	Tyr	Thr	Ile	Thr	Ile	Phe	Gly	Asn	Val	Ser	Ile	Met	Met	Val
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Cys	Ile	Leu	Asp	Pro	Lys	Leu	His	Thr	Pro	Met	Tyr	Phe	Phe	Leu	Thr
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Asn	Leu	Ser	Ile	Leu	Asp	Leu	Cys	Tyr	Thr	Thr	Thr	Thr	Val	Pro	His
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			115					120					125		
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			210				215					220			
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<210> 6061

<211> 1582

<212> DNA

<213> Homo sapiens

<400> 6061

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<210> 6062

<211> 226

<212> PRT

<213> Homo sapiens

<400> 6062

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			20					25					30		
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			115					120					125		
Ile	Val	Val	Ala	Lys	Arg	Ile	Ser	Pro	Arg	Val	Asp	Asp	Val	Val	Lys
			130				135				140				
Ser	Met	Tyr	Pro	Pro	Leu	Asp	Pro	Lys	Leu	Leu	Asp	Ala	Arg	Thr	Thr
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<210> 6063

<211> 2286

<212> DNA

<213> Homo sapiens

<400> 6063

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<210> 6064

<211> 233

<212> PRT

<213> Homo sapiens

<400> 6064

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Pro	Val	Arg	Cys	Ala	Gly	Asp	Trp	Leu	Pro	Arg	Gly	Leu	Gly	Trp	Gly
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<210> 6065

<211> 2084

<212> DNA

<213> Homo sapiens

<400> 6065

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<210> 6066

<211> 80

<212> PRT

<213> Homo sapiens

<400> 6066

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			20					25					30		
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<210> 6067

<211> 406

<212> DNA

<213> Homo sapiens

<400> 6067

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<211> 117

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<213> Homo sapiens

<400> 6068

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Pro Gly Leu Pro Phe Gly Gln Gly Ala Val Ala Arg Ala Ala Pro Cys
65     70     75     80
Pro Ala Tyr Ser His Ser Ala Val Gly Arg Pro Pro Leu Pro Arg Lys
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<210> 6069

<211> 456

<212> DNA

<213> Homo sapiens

<400> 6069

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180

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<210> 6070

<211> 148

<212> PRT

<213> Homo sapiens

<400> 6070

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		20					25						30		
His	Arg	Tyr	His	Arg	Lys	Glu	Asn	Leu	Glu	Tyr	Cys	Ile	Met	Val	Ile
	35					40					45				
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Gln	His	Leu	Arg	Lys	Gly	Lys	Ala	Thr	Arg	Val	Gly	Gly	Glu	Pro	Gly
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			85						90					95	
Arg	Pro	Ser	Thr	Leu	Ser	Arg	Ala	Leu	Gln	Ala	Ser	Gly	Thr	Cys	Arg
		100					105						110		
Pro	Leu	Cys	Gly	Phe	Arg	Leu	Leu	Thr	Thr	Leu	Pro	Ser	Pro	Pro	Leu
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<211> 2633

<212> DNA

<213> Homo sapiens

<400> 6071

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<210> 6072

<211> 76

<212> PRT

<213> Homo sapiens

<400> 6072

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<210> 6073

<211> 387

<212> DNA

<213> Homo sapiens

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<211> 69

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<213> Homo sapiens

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			20					25					30		
Ala	Pro	Thr	Gly	Pro	Phe	Ser	Pro	Arg	Met	Lys	Pro	Ala	Gly	Ser	Val
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<211> 4668

<212> DNA

<213> Homo sapiens

<400> 6075

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<211> 601

<212> PRT

<213> Homo sapiens

<400> 6076

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Cys	Lys	Ala	Ile	Glu	Arg	Gly	Thr	Gly	Asn	Asp	Asn	Tyr	Arg	Thr	Thr
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Gly	Ile	Ala	Thr	Ile	Glu	Val	Phe	Leu	Pro	Pro	Arg	Leu	Lys	Lys	Asp
			85					90					95		
Arg	Lys	Asn	Leu	Leu	Glu	Thr	Arg	Leu	His	Ile	Thr	Gly	Arg	Glu	Leu
			100					105					110		
Arg	Ser	Lys	Ile	Ala	Glu	Thr	Phe	Gly	Leu	Gln	Glu	Asn	Tyr	Ile	Lys
			115				120					125			
Ile	Val	Ile	Asn	Lys	Lys	Gln	Leu	Gln	Leu	Gly	Lys	Thr	Leu	Glu	Glu
			130			135					140				
Gln	Gly	Val	Ala	His	Asn	Val	Lys	Ala	Met	Val	Leu	Glu	Leu	Lys	Gln
145					150					155				160	
Ser	Glu	Glu	Asp	Ala	Arg	Lys	Asn	Phe	Gln	Leu	Glu	Glu	Glu	Glu	Gln


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      165      170      175
Asn Glu Ala Lys Leu Lys Glu Lys Gln Ile Gln Arg Thr Lys Arg Gly
      180      185      190
Leu Glu Ile Leu Ala Lys Arg Ala Ala Glu Thr Val Val Asp Pro Glu
      195      200      205
Met Thr Pro Tyr Leu Asp Ile Ala Asn Gln Thr Gly Arg Ser Ile Arg
      210      215      220
Ile Pro Pro Ser Glu Arg Lys Ala Leu Met Leu Ala Met Gly Tyr His
      225      230      235
Glu Lys Gly Arg Ala Phe Leu Lys Arg Lys Glu Tyr Gly Ile Ala Leu
      245      250      255
Pro Cys Leu Leu Asp Ala Asp Lys Tyr Phe Cys Glu Cys Cys Arg Glu
      260      265      270
Leu Leu Asp Thr Val Asp Asn Tyr Ala Val Leu Gln Leu Asp Ile Val
      275      280      285
Trp Cys Tyr Phe Arg Leu Glu Gln Leu Glu Cys Leu Asp Asp Ala Glu
      290      295      300
Lys Lys Leu Asn Leu Ala Gln Lys Cys Phe Lys Asn Cys Tyr Gly Glu
      305      310      315
Asn His Gln Arg Leu Val His Ile Lys Gly Asn Cys Gly Lys Glu Lys
      325      330      335
Val Leu Phe Leu Arg Leu Tyr Leu Leu Gln Gly Ile Arg Asn Tyr His
      340      345      350
Ser Gly Asn Asp Val Glu Ala Tyr Glu Tyr Leu Asn Arg His Val Ser
      355      360      365
Ser Leu Lys Ser Tyr Ile Leu Ile His Gln Lys Trp Thr Ile Cys Cys
      370      375      380
Ser Trp Gly Leu Leu Pro Arg Lys Xaa Arg Leu Gly Leu Arg Ala Cys
      385      390      395
Asp Gly Asn Val Asp His Ala Ala Thr His Ile Thr Asn Arg Arg Glu
      405      410      415
Glu Leu Ala Gln Ile Arg Lys Glu Glu Lys Glu Lys Lys Arg Arg Arg
      420      425      430
Leu Glu Asn Ile Arg Phe Leu Lys Gly Met Gly Tyr Ser Thr His Ala
      435      440      445
Ala Gln Gln Ile Leu Leu Ser Asn Pro Gln Met Trp Trp Leu Asn Asp
      450      455      460
Ser Asn Pro Glu Thr Asp Asn Arg Gln Glu Ser Pro Ser Gln Glu Asn
      465      470      475
Ile Asp Arg Leu Val Tyr Met Gly Phe Asp Ala Leu Val Ala Glu Ala
      485      490      495
Ala Leu Arg Val Phe Arg Gly Asn Val Gln Leu Ala Ala Gln Thr Leu
      500      505      510
Ala His Asn Gly Gly Ser Leu Pro Pro Glu Leu Pro Leu Ser Pro Glu
      515      520      525
Asp Ser Leu Ser Pro Pro Ala Thr Ser Pro Ser Asp Ser Ala Gly Thr
      530      535      540
Ser Ser Ala Ser Thr Asp Glu Asp Met Glu Thr Glu Ala Val Asn Glu
      545      550      555
Ile Leu Glu Asp Ile Pro Glu His Glu Glu Asp Tyr Leu Asp Ser Thr
      565      570      575
Leu Glu Asp Glu Glu Ile Ile Ile Ala Glu Tyr Leu Ser Tyr Val Glu
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595

600

<210> 6077

<211> 2093

<212> DNA

<213> Homo sapiens

<400> 6077

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120ccgggggttg ggccgcacat ttacgtgcgc gaagcggagg accgggagct ggtgacgatg
180gcggggccgc agcccctggc gctgcaactg gaacagttgt tgaaccgcg accaagcgag
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720ggggatgacg cggaagactc ccaaggcgag agtgaggaag acagggctgg agatagaaac
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1320aagggttttg gtgcctttga acgtcaatc ttgactcaga tcgaccatat tctgatggac
1380

aaagagagat tacttcgaag gacacagacc aagcgctctg tctatcgagt tcttgga
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 1560
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 1620
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 1680
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 1800
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 1860
 cgcccacctc cgacacccag tgggcgcctt ggctgggtgc gctgctggtc cagatggagg
 1920
 aaaccagtga ctttatgggg ctgagctagt agggaagccc ctggaaagat gctgcgttcc
 1980
 gaacctgtgc ctaatacacg caagggcgct gtcccgccca accccgcctt taaacgccac
 2040
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 2093

<210> 6078

<211> 213

<212> PRT

<213> Homo sapiens

<400> 6078

Arg	Pro	Gly	Arg	Ser	Pro	Gly	Ser	Gly	Arg	Ser	Arg	Ala	Val	Gly	Cys
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			20					25					30		
Ser	Gly	Arg	Glu	Gly	Ala	Ser	Gly	Pro	Gly	Val	Gly	Pro	His	Ile	Tyr
			35				40					45			
Val	Arg	Glu	Ala	Glu	Asp	Arg	Glu	Leu	Val	Thr	Met	Ala	Gly	Pro	Gln
	50				55					60					
Pro	Leu	Ala	Leu	Gln	Leu	Glu	Gln	Leu	Leu	Asn	Pro	Arg	Pro	Ser	Glu
65				70					75					80	
Ala	Asp	Pro	Glu	Ala	Asp	Pro	Glu	Glu	Ala	Thr	Ala	Ala	Arg	Val	Ile
			85				90						95		
Asp	Arg	Phe	Asp	Glu	Gly	Glu	Asp	Gly	Glu	Gly	Asp	Phe	Leu	Val	Val
		100				105						110			
Gly	Ser	Ile	Arg	Lys	Leu	Ala	Ser	Ala	Ser	Leu	Leu	Asp	Thr	Asp	Lys
	115				120							125			
Arg	Tyr	Cys	Gly	Lys	Thr	Thr	Ser	Arg	Lys	Ala	Trp	Asn	Glu	Asp	His
	130				135						140				
Trp	Glu	Gln	Thr	Leu	Pro	Gly	Ser	Ser	Asp	Glu	Glu	Ile	Ser	Asp	Glu
145				150					155					160	
Glu	Gly	Ser	Gly	Asp	Glu	Asp	Ser	Glu	Gly	Leu	Gly	Leu	Glu	Glu	Tyr
			165				170						175		
Asp	Glu	Asp	Asp	Leu	Gly	Ala	Ala	Glu	Glu	Gln	Glu	Cys	Gly	Asp	Gln

180 185 190
 Gly Glu Gln Glu Asp Glu Lys Pro Leu Cys Lys Asn Thr Gly Leu Gln
 195 200 205
 Cys Pro Glu Tyr Gln
 210

<210> 6079
 <211> 651
 <212> DNA
 <213> Homo sapiens

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 120
 catgcgcagc ggggccgtgg gtgtacgcgg cgcagcgcgg cagtcctgat ggcccggcat
 180
 gggttaccgc tgcgtcccct gctgtcgtc ctggtcggcg cgtggctcaa gctaggaaat
 240
 ggacaggcta ctagcatggt ccaactgcag ggtgggagat tctgatggg aacaaattct
 300
 ccagacagca gagatggtga agggcctgtg cgggaggcga cagtgaacc ctttgccatc
 360
 gacatatttc ctgtcaccaa caaagatttc agggattttg tcaggagaaa aaagtatcgg
 420
 acagaagctg agatgtttgg atggagcttt gtctttgagg actttgtctc tgatgagctg
 480
 agaaacaaag ccaccagcc aatgaagtct gtactctggt ggcttcagtg ggaaaaggca
 540
 ttttgagggc agcctgcagg tcttggtctt ggcattccag agagactgga gcaccagtg
 600
 ttacacgtga gctggaatga cggccgtgcc tactgtgctt ggcggggaaa a
 651

<210> 6080
 <211> 162
 <212> PRT
 <213> Homo sapiens

<400> 6080
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 1 5 10 15
 Val Gly Ala Trp Leu Lys Leu Gly Asn Gly Gln Ala Thr Ser Met Val
 20 25 30
 Gln Leu Gln Gly Gly Arg Phe Leu Met Gly Thr Asn Ser Pro Asp Ser
 35 40 45
 Arg Asp Gly Glu Gly Pro Val Arg Glu Ala Thr Val Lys Pro Phe Ala
 50 55 60
 Ile Asp Ile Phe Pro Val Thr Asn Lys Asp Phe Arg Asp Phe Val Arg
 65 70 75 80
 Glu Lys Lys Tyr Arg Thr Glu Ala Glu Met Phe Gly Trp Ser Phe Val
 85 90 95
 Phe Glu Asp Phe Val Ser Asp Glu Leu Arg Asn Lys Ala Thr Gln Pro

```

<400> 6082
Asp Asn Asp Gln Glu Pro Pro Tyr Ser Met Ile Thr Leu His Glu Met
 1          5          10          15
Ala Glu Thr Asp Glu Gly Trp Leu Asp Val Val Gln Ser Leu Ile Arg
          20          25          30
Val Ile Pro Leu Glu Asp Pro Leu Gly Pro Ala Val Ile Thr Leu Leu
          35          40          45
Leu Asp Glu Cys Pro Leu Pro Thr Lys Asp Ala Leu Gln Lys Leu Thr
          50          55          60
Glu Ile Leu Asn Leu Asn Gly Glu Val Ala Cys Gln Asp Ser Ser His

```

```

65          70          75          80
Pro Ala Lys His Arg Asn Thr Ser Ala Val Leu Gly Cys Leu Ala Glu
          85          90          95
Lys Leu Ala Gly Pro Ala Ser Ile Gly Leu Leu Ser Pro Gly Ile Leu
          100          105          110
Glu Tyr Leu Leu Gln Cys Leu Lys Leu Gln Ser His Pro Thr Val Met
          115          120          125
Leu Phe Ala Leu Ile Ala Leu Glu Lys Phe Ala Gln Thr Ser Glu Asn
          130          135          140
Lys Leu Thr Ile Ser Glu Ser Ser Ile Ser Asp Arg Leu Val Thr Leu
          145          150          155          160
Glu Ser Trp Ala Asn Asp Pro Asp Tyr Leu Lys Arg Gln Val Gly Phe
          165          170          175
Cys Ala Gln Trp Ser Leu Asp Asn Leu Phe Leu Lys Glu Gly Arg Gln
          180          185          190
Leu Thr Tyr Glu Lys Val Asn Leu Ser Ser Ile Arg Ala Met Leu Asn
          195          200          205
Ser Asn Asp Val Ser Glu Tyr Leu Lys Ile
          210          215

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<210> 6083
 <211> 358
 <212> DNA
 <213> Homo sapiens

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<400> 6083
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120
aatgaaaggc taacagcttt acaagagaag ctgatcgctg aagggcatct aaccaaagcg
180
gtagaagaaa caaagctttc aaaagaaaat cagacaagag caaaagaatc tgatttttca
240
gatactctga gtccaagcaa ggaaaaaagc agtgacgaca ctacagacgc ccaaattggat
300
gagcaagacc taaatgagcc tcttgccaaa gtgtcccttt taaaagatga cttgcagg
358

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<210> 6084
 <211> 101
 <212> PRT
 <213> Homo sapiens

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<400> 6084
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Ala Asp Asn Asp Phe Thr Asn Glu Arg Leu Thr Ala Leu Gln Glu Lys
20     25     30
Leu Ile Val Glu Gly His Leu Thr Lys Ala Val Glu Glu Thr Lys Leu
35     40     45
Ser Lys Glu Asn Gln Thr Arg Ala Lys Glu Ser Asp Phe Ser Asp Thr
50     55     60
Leu Ser Pro Ser Lys Glu Lys Ser Ser Asp Asp Thr Thr Asp Ala Gln

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65		70		75		80									
Met	Asp	Glu	Gln	Asp	Leu	Asn	Glu	Pro	Leu	Ala	Lys	Val	Ser	Leu	Leu
			85						90					95	
Lys	Asp	Asp	Leu	Gln											
			100												

<210> 6085

<211> 2307

<212> DNA

<213> Homo sapiens

<400> 6085

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120
ggttacgaaa cagtgggttg ccctgggtgat gttctttaca tcccaatgta ctggtggtcat
180
cacatagagt cactactaaa tgggggggatt accatcactg tgaacttctg gtataagggg
240
gctcccaccc ctaagagaat tgaatatact ctcaaagctc atcagaaagt ggccataatg
300
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360
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420
ggtgactgct atcccgctcca caccgcttca ttgatgagga caggagactc caagcgctag
480
tattgcacgc tgcacttaat ggactggact cttgccatgg ccaggagtc aggtgttttg
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600
tgtgcccctg caccttctct ctctgcccc cgcctaaagt cctgcattca gtgtgtggag
660
ccccagcttt tggttgtcat catgtctgtg tgtatgttag tctgtcaact tcggaatgtg
720
tgcggtgtgt tgcattgaca cgcattgatg tatctgttcc ctgttccttc tgggtcaggc
780
tgtcacttcc ggctctcagc cctatctcct gcaacctcag tgcctcagcc tgagagagag
840
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900
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taaaaggacc ttgggacata agaaccaatg attgtgcata agttctaaat tagagacaca
1140
tatagtttct ctctttcagc accagctctt gccctatgc tgggtaccaa gggagtcttc
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1260

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ctgtgtgtgc gtatcacact aggggtgcaa gcctctgggt gtgtgtgtgt gtgtgcgtgc
 1320
 gtgtgtgtgt gtgtgtccgt gtgtgtgtgt gtgtgtgtcc aactggcca gcctccctac
 1380
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 1440
 aagtactgcc tgacctatcc taagctttta cacttggttt ttagccatca tatgttggcc
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 1680
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 1740
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 1800
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 1860
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 1920
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 1980
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 2100
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 2160
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 2220
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 2280
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 2307

<210> 6086

<211> 84

<212> PRT

<213> Homo sapiens

<400> 6086

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Arg	Gly	Ala	Ser	Leu	Cys	Val	Phe	Val	Cys	Val	Cys	Leu	Cys	Val	Arg
			20					25					30		
Ile	Thr	Leu	Gly	Val	Gln	Ala	Ser	Gly	Cys	Val	Cys	Val	Cys	Ala	Cys
		35				40					45				
Val	Cys	Val	Cys	Val	Ser	Val	Cys	Val	Cys	Val	Cys	Val	His	Thr	Gly
	50				55				60						
Gln	Pro	Pro	Tyr	Leu	Pro	Arg	Phe	Ser	Thr	Ala	Tyr	Leu	Phe	Gln	Trp
65					70				75					80	
Asp	Ser	Thr	Val												

<210> 6087
<211> 1506
<212> DNA
<213> Homo sapiens

<400> 6087
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120
ctcttgtccc aagagaagcg ggcagcggaa acgcactttg ggtttgagac tgtgtcggaa
180
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240
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360
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gcccaacaaa atttatcctg ggaagaaatt gccaaagagt accagaatga agaagattcc
480
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660
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720
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780
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900
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960
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1020
ttgaaagcct ggaactgaag gataatctgg caaatgagac agcagcagag catctcctct
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1380

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 aaaaaa
 1506

<210> 6088

<211> 326

<212> PRT

<213> Homo sapiens

<400> 6088

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Ser	Arg	Ala	Met	Arg	Gly	Cys	Gln	Leu	Leu	Gly	Leu	Arg	Ser	Ser	Trp	20	25	30	
Pro	Gly	Asp	Leu	Leu	Ser	Ala	Arg	Leu	Leu	Ser	Gln	Glu	Lys	Arg	Ala	35	40	45	
Ala	Glu	Thr	His	Phe	Gly	Phe	Glu	Thr	Val	Ser	Glu	Glu	Glu	Lys	Gly	50	55	60	
Gly	Lys	Val	Tyr	Gln	Val	Phe	Glu	Ser	Val	Ala	Lys	Lys	Tyr	Asp	Val	65	70	75	80
Met	Asn	Asp	Met	Met	Ser	Leu	Gly	Ile	His	Arg	Val	Trp	Lys	Asp	Leu	85	90	95	
Leu	Leu	Trp	Lys	Met	His	Pro	Leu	Pro	Gly	Thr	Gln	Leu	Leu	Asp	Met	100	105	110	
Ala	Gly	Gly	Thr	Gly	Asp	Ile	Ala	Phe	Arg	Phe	Leu	Asn	Tyr	Val	Gln	115	120	125	
Ser	Gln	His	Gln	Arg	Lys	Gln	Lys	Arg	Gln	Leu	Arg	Ala	Gln	Gln	Asn	130	135	140	
Leu	Ser	Trp	Glu	Glu	Ile	Ala	Lys	Glu	Tyr	Gln	Asn	Glu	Glu	Asp	Ser	145	150	155	160
Leu	Gly	Gly	Ser	Arg	Val	Val	Val	Cys	Asp	Ile	Asn	Lys	Glu	Met	Leu	165	170	175	
Lys	Val	Gly	Lys	Gln	Lys	Ala	Leu	Ala	Gln	Gly	Tyr	Arg	Ala	Gly	Leu	180	185	190	
Ala	Trp	Val	Leu	Gly	Asp	Ala	Glu	Glu	Leu	Pro	Phe	Asp	Asp	Asp	Lys	195	200	205	
Phe	Asp	Ile	Tyr	Thr	Ile	Ala	Phe	Gly	Ile	Arg	Asn	Val	Thr	His	Ile	210	215	220	
Asp	Gln	Ala	Leu	Gln	Glu	Ala	His	Arg	Val	Leu	Lys	Pro	Gly	Gly	Arg	225	230	235	240
Phe	Leu	Cys	Leu	Glu	Phe	Ser	Gln	Val	Asn	Asn	Pro	Leu	Ile	Ser	Arg	245	250	255	
Leu	Tyr	Asp	Leu	Tyr	Ser	Phe	Gln	Val	Ile	Pro	Val	Leu	Gly	Glu	Val	260	265	270	
Ile	Ala	Gly	Asp	Trp	Lys	Ser	Tyr	Gln	Tyr	Leu	Val	Glu	Ser	Ile	Arg	275	280	285	
Arg	Phe	Pro	Ser	Gln	Glu	Glu	Phe	Lys	Asp	Met	Ile	Glu	Asp	Ala	Gly	290	295	300	
Phe	His	Lys	Val	Thr	Tyr	Glu	Ser	Leu	Thr	Ser	Gly	Ile	Val	Ala	Ile	305	310	315	320
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325

<210> 6089

<211> 4211

<212> DNA

<213> Homo sapiens

<400> 6089

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<210> 6090

<211> 839

<212> PRT

<213> Homo sapiens

<400> 6090

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5272

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 Lys Gln Gly Ile Pro Met Lys Glu Ile Leu Gly Gln Pro Ser Ser Lys
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 Arg Met Asn Tyr Ser Glu Val Pro Tyr Val His Lys Lys Ser Ser Thr
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 Gly Glu Arg Pro His Lys Cys Asn Glu Cys Gly Lys Ser Phe Ile Gln
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 Phe Arg Cys Glu Glu Cys Gly Lys Ser Tyr Asn Gln Arg Val His Leu
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 Ser Val His Ser Gly Glu Arg Pro Phe Lys Cys Asn Glu Cys Gly Lys
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 675 680 685
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 690 695 700
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<210> 6091

<211> 1336

<212> DNA

<213> Homo sapiens

<400> 6091

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<210> 6092

<211> 118

<212> PRT

<213> Homo sapiens

<400> 6092

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Thr Pro Asn Trp Tyr Trp Val Leu Gly His Pro Asn Leu Ile Arg Asp
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Val Thr Arg Gln Val Pro Ser Pro Pro Ser Gly Phe Arg Leu Pro Ser
                50           55           60
Ser Arg His Glu Gly Pro Ser Pro Pro Arg Asp Leu Gly Thr Ser Gly
65           70           75           80
Pro Ser Arg Ala Ala Ser His Lys Pro Ser Asn Glu Gln Arg Asp Ala
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<210> 6093

<211> 1998

<212> DNA

<213> Homo sapiens

<400> 6093

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<210> 6094

<211> 136

<212> PRT

<213> Homo sapiens

<400> 6094

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	50				55				60						
Ser	Cys	Asn	Phe	Leu	Gly	Glu	Glu	Thr	Phe	Ser	Ser	Phe	Pro	Phe	Leu
65			70				75						80		
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<210> 6095
 <211> 441
 <212> DNA
 <213> Homo sapiens

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<400> 6095
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<210> 6096
 <211> 97
 <212> PRT
 <213> Homo sapiens

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<400> 6096
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35     40     45
Thr Cys Ala Ile Cys Arg Val Gln Val Met Val Val Trp Gly Glu Cys
50     55     60
Asn His Ser Phe His Asn Cys Cys Met Ser Leu Trp Val Lys Gln Asn
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85     90     95
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<210> 6097
 <211> 2404

<212> DNA

<213> Homo sapiens

<400> 6097

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<210> 6098

<211> 631

<212> PRT

<213> Homo sapiens

<400> 6098

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Phe Tyr Pro Leu Ser Leu Leu Glu Thr Gly Ser Asp Leu Leu Leu Phe
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Phe Leu Glu Pro Leu Gly Thr Leu Gly Tyr Cys Gly Ala Val Gly Leu
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<210> 6099

<211> 3957

<212> DNA

<213> Homo sapiens

<400> 6099

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<210> 6100
<211> 1102
<212> PRT
<213> Homo sapiens
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5284

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 Val Asp Glu Glu Ser Ser Asp Gly Glu Pro Asp Gln Glu Ala Val Gln
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 Asp Glu Arg Thr Leu Glu Lys Thr Gln Gln Gln His Met Leu Tyr Gln
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 Gln Glu Gln His His Gln Ile Leu Gln Gln Gln Ile Gln Asp Ser Ile
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<211> 1447

<212> DNA

<213> Homo sapiens

<400> 6101

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<210> 6102

<211> 123

<212> PRT

<213> Homo sapiens.

<400> 6102

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			20					25					30		
Leu	Ala	Met	Val	Ser	Gly	Asp	Gly	Phe	Leu	Val	Ser	Arg	Pro	Glu	Ala
		35					40					45			
Ile	His	Leu	Gly	Pro	Arg	Gln	Ala	Val	Arg	Pro	Ser	Val	Arg	Ala	Glu
	50					55				60					
Ser	Arg	Arg	Val	Asp	Gly	Gly	Gly	Arg	Ser	Pro	Arg	Glu	Pro	Asp	Gly
65					70					75				80	
Arg	Gly	Arg	Ser	Arg	Gln	Ala	Arg	Phe	Ser	Pro	Tyr	Pro	Ile	Pro	Ala
			85					90					95		
Val	Glu	Pro	Asp	Leu	Leu	Arg	Ser	Val	Leu	Gln	Gln	Arg	Leu	Ile	Ala
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<210> 6103

<211> 309

<212> DNA

<213> Homo sapiens

<400> 6103

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<210> 6104

<211> 71

<212> PRT

<213> Homo sapiens

<400> 6104

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<210> 6105

<211> 1846

<212> DNA

<213> Homo sapiens

<400> 6105

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<210> 6106

<211> 405

<212> PRT

<213> Homo sapiens

<400> 6106

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 Asn Ser Thr Gln Pro Ser Thr Ala Gly Met Lys Trp Cys Leu Pro Phe
 35 40 45
 His Leu Leu Cys Arg Gly Pro Ser Gly Ser Leu Ser Ala Pro Pro Ala
 50 55 60
 Ala Ser Val Ile Ser Ala Pro Pro Ser Ser Ser Arg His Arg Lys
 65 70 75 80
 Arg Arg Arg Thr Ser Ser Lys Ser Glu Ala Gly Ala Arg Gly Gly Gly
 85 90 95
 Gln Gly Ser Lys Glu Lys Gly Arg Gly Ser Trp Gly Gly Arg His His
 100 105 110
 His His His Pro Leu Pro Ala Ala Gly Phe Lys Lys Gln Gln Arg Lys
 115 120 125
 Phe Gln Tyr Gly Asn Tyr Cys Lys Tyr Tyr Gly Tyr Arg Asn Pro Ser
 130 135 140
 Cys Glu Asp Gly Arg Leu Arg Val Leu Lys Pro Glu Trp Phe Arg Gly
 145 150 155 160
 Arg Asp Val Leu Asp Leu Gly Cys Asn Val Gly His Leu Thr Leu Ser
 165 170 175
 Ile Ala Cys Lys Trp Gly Pro Ser Arg Met Val Gly Leu Asp Ile Asp
 180 185 190
 Ser Arg Leu Ile His Ser Ala Arg Gln Asn Ile Arg His Tyr Leu Ser
 195 200 205
 Glu Glu Leu Arg Leu Pro Pro Gln Thr Leu Glu Gly Asp Pro Gly Ala
 210 215 220
 Glu Gly Glu Glu Gly Thr Thr Thr Val Arg Lys Arg Ser Cys Phe Pro
 225 230 235 240
 Ala Ser Leu Thr Ala Ser Arg Gly Pro Ile Ala Ala Pro Gln Val Pro
 245 250 255
 Leu Asp Gly Ala Asp Thr Ser Val Phe Pro Asn Asn Val Val Phe Val
 260 265 270
 Thr Gly Asn Tyr Val Leu Asp Arg Asp Asp Leu Val Glu Ala Gln Thr
 275 280 285
 Pro Glu Tyr Asp Val Val Leu Cys Leu Ser Leu Thr Lys Trp Val His
 290 295 300
 Leu Asn Trp Gly Asp Glu Gly Leu Lys Arg Met Phe Arg Arg Ile Tyr
 305 310 315 320
 Arg His Leu Arg Pro Gly Gly Ile Leu Val Leu Glu Pro Gln Pro Trp
 325 330 335
 Ser Ser Tyr Gly Lys Arg Lys Thr Leu Thr Glu Thr Ile Tyr Lys Asn
 340 345 350
 Tyr Tyr Arg Ile Gln Leu Lys Pro Glu Gln Phe Ser Ser Tyr Leu Thr
 355 360 365
 Ser Pro Asp Val Gly Phe Ser Ser Tyr Glu Leu Val Ala Thr Pro His
 370 375 380
 Asn Thr Ser Lys Gly Phe Gln Arg Pro Val Tyr Leu Phe His Lys Ala
 385 390 395 400
 Arg Ser Pro Ser His
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<210> 6107
 <211> 896
 <212> DNA
 <213> Homo sapiens

<400> 6107
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 180
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 300
 aggtggagga cggatgtgct gctgctgac acaatagcgc ccaggagctg gttgctaccg
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 ctgtctgcta cgtaggtaga gagccaagct aggaccaagg ctagaatcag caccaccaca
 420
 cctgccacca ccatcacctc attaccacaca ccctcaatga gggtgacatc agtgaccccc
 480
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 540
 ggcagccctt cggttcgggt gggcccagac ccagtcctaa cgccgagggga ataggaccat
 600
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 660
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 720
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 780
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 840
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 896

<210> 6108
 <211> 124
 <212> PRT
 <213> Homo sapiens

<400> 6108
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 Gly Leu Ser Ser Asp Leu Arg Gly Ala Ser Gly Leu Leu Leu Pro Ala
 20 25 30
 Pro Ala Cys Leu Leu Gly Arg Pro Trp Met Ser Arg Arg Cys Ser Arg
 35 40 45
 Leu Gly Ser Thr Pro Pro Pro Ala Pro Ala Ser Pro Val Glu Ser Pro
 50 55 60
 Arg Pro Ser Pro Ala Ser Ser Ala Phe Ser Ser Leu Pro Ser Asp Gly
 65 70 75 80
 Trp Gly Ser Ser Val Gly Ser Gly Leu Pro Trp Pro Ala Thr Arg Trp

	85		90		95										
Ser	Thr	Cys	Pro	Arg	Trp	Arg	Thr	Asp	Val	Ser	Pro	Ala	Asp	Thr	Ile
		100				105						110			
Ala	Pro	Arg	Ser	Trp	Leu	Leu	Pro	Leu	Ser	Ala	Thr				
		115				120									

<210> 6109
 <211> 2087
 <212> DNA
 <213> Homo sapiens

<400> 6109
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 120
 ggtagcttca gagcctccag tgccctgtggg gctggaggtg aagttggggg ccctgggtgct
 180
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 240
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 360
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 480
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 780
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 840
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 900
 ggcattggcag ctggcacctt tctctatata acctttctgg aaatcctgcc ccaggagctg
 960
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 1080
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 1140
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 1200
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 1260

atggtcaagt cgctagagac atatcagggg acattaggat tggggaagac acttgactgc
 1320
 tagaatcaga gggtggacac tatacataag gacaggctca catgggaggc tggaggtggg
 1380
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 1620
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 1680
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 1740
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 1860
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 1920
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 2040
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 2087

<210> 6110

<211> 323

<212> PRT

<213> Homo sapiens

<400> 6110

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Ser	Phe	Arg	Ala	Ser	Ser	Ala	Cys	Gly	Ala	Gly	Gly	Glu	Val	Gly	Gly
			20					25					30		
Pro	Gly	Ala	Ala	Ala	Gly	Leu	Thr	Leu	Leu	Cys	Ser	Leu	Val	Pro	Ile
			35					40					45		
Cys	Val	Leu	Arg	Arg	Pro	Gly	Ala	Asn	His	Glu	Gly	Ser	Ala	Ser	Arg
			50				55				60				
Gln	Lys	Ala	Leu	Ser	Leu	Val	Ser	Cys	Phe	Ala	Gly	Gly	Val	Phe	Leu
65					70					75				80	
Ala	Thr	Cys	Leu	Leu	Asp	Leu	Leu	Pro	Asp	Tyr	Leu	Ala	Ala	Ile	Asp
			85					90						95	
Glu	Ala	Leu	Ala	Ala	Leu	His	Val	Thr	Leu	Gln	Phe	Pro	Leu	Gln	Glu
			100					105					110		
Phe	Ile	Leu	Ala	Met	Gly	Phe	Phe	Leu	Val	Leu	Val	Met	Glu	Gln	Ile
			115				120					125			
Thr	Leu	Ala	Tyr	Lys	Glu	Gln	Ser	Gly	Pro	Ser	Pro	Leu	Glu	Glu	Thr
			130				135					140			
Arg	Ala	Leu	Leu	Gly	Thr	Val	Asn	Gly	Gly	Pro	Gln	His	Trp	His	Asp

145 150 155 160
 Gly Pro Gly Val Pro Gln Ala Ser Gly Ala Pro Ala Thr Pro Ser Ala
 165 170 175
 Leu Arg Ala Cys Val Leu Val Phe Ser Leu Ala Leu His Ser Val Phe
 180 185 190
 Glu Gly Leu Ala Val Gly Leu Gln Arg Asp Arg Ala Arg Ala Met Glu
 195 200 205
 Leu Cys Leu Ala Leu Leu Leu His Lys Gly Ile Leu Ala Val Ser Leu
 210 215 220
 Ser Leu Arg Leu Leu Gln Ser His Leu Arg Ala Gln Val Val Ala Gly
 225 230 235 240
 Cys Gly Ile Leu Phe Ser Cys Met Thr Pro Leu Gly Ile Gly Leu Gly
 245 250 255
 Ala Ala Leu Ala Glu Ser Ala Gly Pro Leu His Gln Leu Ala Gln Ser
 260 265 270
 Val Leu Glu Gly Met Ala Ala Gly Thr Phe Leu Tyr Ile Thr Phe Leu
 275 280 285
 Glu Ile Leu Pro Gln Glu Leu Ala Ser Ser Glu Gln Arg Ile Leu Lys
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 Val Ile Leu Leu Leu Ala Gly Phe Ala Leu Leu Thr Gly Leu Leu Phe
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<210> 6111

<211> 1706

<212> DNA

<213> Homo sapiens

<400> 6111

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 180
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 240
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 300
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 420
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 780
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 960
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 1020
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 1080
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 1140
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 1560
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 1680
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 1706

<210> 6112

<211> 110

<212> PRT

<213> Homo sapiens

<400> 6112

Met Ser Leu Phe Cys Phe Val Leu Phe Leu Arg Trp Ser Phe Pro Leu
 1 5 10 15
 Val Ala Gln Ala Gly Val Xaa Trp His Ser Leu Gly Ser Leu Gln Pro
 20 25 30
 Pro Leu Pro Gly Phe Lys Gln Phe Ser Cys Arg Ser Leu Pro Ser Ser
 35 40 45
 Trp Asp Tyr Arg His Ala Pro Pro Arg Gln Ala Asn Phe Cys Ile Phe
 50 55 60
 Ser Arg Asp Gly Val Ser Pro Cys Trp Pro Gly Trp Ser Gln Thr Pro
 65 70 75 80
 Asp Leu Arg Arg Ser Thr His Leu Ser Val Pro Lys Cys Trp Asp Tyr
 85 90 95
 Arg Arg Glu Pro Pro His Leu Ala Tyr Glu Trp Ser Phe Asn

100 105 110

<210> 6113
<211> 1095
<212> DNA
<213> Homo sapiens

<400> 6113
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180
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240
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300
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360
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420
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480
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540
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600
atacgctggt gtgtatgac ccatttctaat attgtgaggg taagtgcagg gaattttgac
660
tcattctggt atctactgaa ttttaattctc tgggatttga aagtagcacg tatgtttgca
720
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900
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960
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1080
aggcagaagg aacta
1095

<210> 6114
<211> 87
<212> PRT
<213> Homo sapiens

<400> 6114
Met Cys Phe Phe Val Glu Leu Lys Lys Ala Ser Lys Arg Met Thr Cys

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1           5           10           15
His Lys Arg Tyr Lys Ile Gln Lys Lys Val Arg Glu His His Arg Lys
      20           25           30
Leu Arg Lys Glu Ala Lys Lys Arg Gly His Lys Lys Pro Arg Lys Asp
      35           40           45
Pro Gly Val Pro Asn Ser Ala Pro Phe Lys Glu Ala Leu Leu Glu Glu
      50           55           60
Ala Glu Leu Arg Lys Gln Arg Leu Glu Glu Leu Lys Gln Gln Gln Lys
      65           70           75           80
Leu Asp Arg Gln Lys Glu Leu
      85

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<210> 6115

<211> 411

<212> DNA

<213> Homo sapiens

<400> 6115

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gcgcgcctgg ccccgccagg gcctaagttc cctgcactcg cttccccgcc tgcgcgcgcc
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120
actgtggcgt cccagggcgg tggagggagc aacttcgggg gcacgtcctc gtaaattccc
180
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240
tgagggcgga gagcactcgc cccctgact tgcaaagttg gcgtctttac ttggcctccg
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ggattctcgc catggcgtgt ctccaggctg ctgatgggca agacagatgt gccaggcca
360
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411

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<210> 6116

<211> 129

<212> PRT

<213> Homo sapiens

<400> 6116

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Met Ala Thr Asn Ser Ser Gln Val His Ser Gly Pro Gly Thr Ser Val
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Leu Pro Ile Ser Ser Leu Glu Thr Arg His Ala Gln Asn Pro Gly Gly
      20           25           30
Gln Val Lys Thr Pro Thr Leu Gln Val Arg Gly Ala Ser Ala Leu Ala
      35           40           45
Pro Gln Phe Pro Gln Arg Asn Arg Leu Leu Ala Ser Arg Val Gly Tyr
      50           55           60
Arg Val Ser Val Leu His Gly Ile Tyr Glu Asp Val Pro Pro Lys Leu
      65           70           75           80
Leu Pro Pro Pro Pro Trp Asp Ala Thr Val Arg Pro Ala Asp Glu Phe
      85           90           95
Leu Pro Gln Arg Pro Arg Glu Gly Gly Leu Arg Ala Ala Ala Ala Ala
      100          105          110
Thr Gly Gly Glu Ala Ser Ala Gly Asn Leu Gly Pro Gly Gly Ala Arg

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115 120 125

Arg

<210> 6117
 <211> 962
 <212> DNA
 <213> Homo sapiens

<400> 6117
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 120
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 180
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 240
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 300
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 360
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 420
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 480
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 660
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 720
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 780
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 840
 aatacgtatt tttggcaggg agagggaacg gtccatgaaa tctttatgtg atataaggat
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 960
 aa
 962

<210> 6118
 <211> 113
 <212> PRT
 <213> Homo sapiens

<400> 6118
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 Ser Gly Ser Ser Gly Ser Lys Ser Gly Gly Asp Lys Met Phe Ser Leu

20 25 30
 Lys Lys Trp Asn Ala Val Ala Met Trp Ser Trp Asp Val Glu Cys Asp
 35 40 45
 Thr Cys Ala Ile Cys Arg Val Gln Val Met Asp Ala Cys Leu Arg Cys
 50 55 60
 Gln Ala Glu Asn Lys Gln Glu Asp Cys Val Val Val Trp Gly Glu Cys
 65 70 75 80
 Asn His Ser Phe His Asn Cys Cys Met Ser Leu Trp Val Lys Gln Asn
 85 90 95
 Asn Arg Cys Pro Leu Cys Gln Gln Asp Trp Val Val Gln Arg Ile Gly
 100 105 110
 Lys

<210> 6119

<211> 375

<212> DNA

<213> Homo sapiens

<400> 6119

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 120
 tggccccaca gaactcatgc ctgcttgctt taaacccacc aatgaaaact ccccatggga
 180
 aacctgcttg gataatactt tggaccccaa taaatgcttt aatcccacaa gtcctctgtc
 240
 tctgctctc tcttgccct acccactggg tgagcatgtg tgtcccaaac ggccctgcaa
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 375

<210> 6120

<211> 118

<212> PRT

<213> Homo sapiens

<400> 6120

Met Gly Lys Leu Asp Thr Ala Pro Trp Thr Cys Pro Thr Asp Pro His
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 Thr Pro His Gly Leu His Gly Asn Ile Thr Val Thr Ile Ser Gln Ser
 20 25 30
 Gln Arg Gly Pro Thr Glu Leu Met Pro Ala Cys Phe Lys Pro Thr Asn
 35 40 45
 Glu Asn Ser Pro Trp Glu Thr Cys Leu Asp Asn Thr Leu Asp Pro Asn
 50 55 60
 Lys Cys Phe Asn Pro Thr Ser Pro Leu Ser Leu Pro Leu Ser Cys Pro
 65 70 75 80
 Tyr Pro Leu Val Glu His Val Cys Pro Lys Arg Pro Cys Lys Val Cys
 85 90 95
 Cys Pro Val Leu Ser Gly Leu Cys Gln Gly Ile Lys Leu Leu Leu Leu

100
Cys Asp Val Ser Cys Cys
115

105

110

<210> 6121
<211> 1039
<212> DNA
<213> Homo sapiens

<400> 6121
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ttgtaaacaat tgatttgaat gatgacaaca tttgcagtgt ttgtaaactg ggaacagaca
120
aagaaacact ctccttctgc cacatttggt ttgagctaaa tattgagggg gtaccaaagt
180
ctgatctctt gcacacaaaa tcattaaggg gccataaaga ctgctttgaa aaataccatt
240
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<211> 221
<212> PRT
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Tyr His Leu Ile Ala Asn Gln Gly Cys Pro Arg Ser Lys Leu Ser Lys
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Ser Thr Tyr Glu Glu Val Lys Thr Ile Leu Ser Lys Lys Ile Asn Trp
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Ile Val Gln Tyr Ala Gln Asn Lys Asp Leu Asp Ser Asp Ser Glu Cys
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Ser Lys Lys Pro Gln His His Leu Phe Asn Phe Arg His Lys Pro Glu
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      130          135          140
Lys Trp Ile Asp Gly Ser Ala Gly Gly Ile Ser Asn Cys Thr Gln Arg
      145          150          155          160
Ile Leu Glu Gln Arg Glu Asn Thr Asp Phe Gly Leu Ser Met Leu Gln
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Asp Ser Gly Ala Thr Leu Cys Arg Asn Ser Val Leu Trp Pro His Ser
      180          185          190
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<212> DNA

<213> Homo sapiens

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<211> 300

<212> PRT

<213> Homo sapiens

<400> 6124

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			20					25					30		
Cys	Thr	Pro	Ala	Trp	Ala	Thr	Arg	Ala	Lys	Gln	Gln	Glu	Lys	Lys	Lys
			35				40					45			
Glu	Ala	Ala	Leu	Cys	Pro	Lys	Pro	Thr	Ser	Arg	Ser	Pro	Asn	Leu	Gly
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Pro	Leu	Gly	Leu	Phe	Ser	Leu	Ser	Val	Pro	Asn	Leu	Leu	Ala	Gly	
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Asn	Lys	Pro	Pro	Gly	Leu	Leu	Pro	Arg	Lys	Gly	Leu	Tyr	Met	Ala	Asn
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Asp	Leu	Lys	Leu	Leu	Arg	His	His	Leu	Gln	Ile	Pro	Ile	His	Phe	Pro
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Lys	Asp	Phe	Leu	Ser	Val	Met	Leu	Glu	Lys	Gly	Ser	Leu	Ser	Ala	Met
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Leu	Trp	Glu	Ser	Ser	Gly	Arg	Thr	Leu	Asp	Asp	Phe	Leu	Thr	Phe	Pro
			165					170						175	
Arg	His	Val	Phe	Arg	Val	Met	Ile	Leu	Pro	Pro	Pro	Gly	Gly	Ser	Thr
		180					185						190		
Val	Leu	Pro	Val	Thr	Pro	Leu	Ser	Pro	His	Arg	Leu	Pro	Ala	Val	Phe
	195						200					205			
Ser	Ser	Ser	Gln	Asn	Glu	Asp	Ile	Thr	Glu	Pro	Gln	Ser	Ile	Leu	Ala
	210					215					220				
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225					230					235				240	
Glu	Lys	Ile	Ala	Thr	Pro	Lys	Val	Lys	Asn	Gln	Leu	Lys	Glu	Thr	Thr
			245						250					255	
Glu	Ala	Ala	Cys	Arg	Tyr	Gly	Ala	Phe	Gly	Leu	Pro	Ile	Thr	Val	Ala
		260					265						270		
His	Val	Asp	Gly	Gln	Thr	His	Met	Leu	Phe	Gly	Ser	Asp	Arg	Met	Glu
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295

300

<210> 6125

<211> 468

<212> DNA

<213> Homo sapiens

<400> 6125

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<210> 6126

<211> 156

<212> PRT

<213> Homo sapiens

<400> 6126

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35 40 45
Gln Ile Ala Glu Thr Lys Ala Arg Leu Ile Thr Gln Gln His Asp Arg
50 55 60
Ala Gln Glu Gln Ser Asp His Ala Leu Met Leu Arg Glu Leu Gln Lys
65 70 75 80
Leu Leu Gln Glu Glu Arg Thr Gln Arg Gln Asp Leu Glu Leu Arg Leu
85 90 95
Glu Glu Thr Arg Glu Ala Leu Ala Gly Arg Ala Tyr Ala Ala Glu Gln
100 105 110
Met Glu Gly Phe Glu Leu Gln Thr Lys Gln Leu Thr Arg Glu Val Glu
115 120 125
Glu Leu Lys Ser Glu Leu Gln Ala Ile Arg Asp Glu Lys Asn Gln Pro
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Asp Pro Arg Leu Gln Glu Leu Gln Glu Glu Ala Ala
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<210> 6127

<211> 1900

<212> DNA

<213> Homo sapiens

<400> 6127

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<210> 6128

<211> 530

<212> PRT

<213> Homo sapiens

<400> 6128

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		20						25					30		
Ala	Ser	Leu	Ala	Asp	Arg	Ala	Ser	Arg	Ala	Arg	Asp	Ser	Asn	Met	Val
		35					40					45			
Arg	Ala	Ala	Ala	Glu	Leu	Ala	Leu	Ser	Cys	Leu	Pro	His	Ala	His	Ala
	50					55				60					
Leu	Asn	Pro	Asn	Glu	Ile	Gln	Arg	Ala	Leu	Val	Gln	Cys	Lys	Glu	Gln
65				70					75					80	
Asp	Asn	Leu	Met	Leu	Glu	Lys	Ala	Cys	Met	Ala	Val	Glu	Glu	Ala	Ala
			85					90					95		
Lys	Gly	Gly	Gly	Val	Tyr	Pro	Glu	Val	Leu	Phe	Glu	Val	Ala	His	Gln
		100						105					110		
Trp	Phe	Trp	Leu	Tyr	Glu	Gln	Thr	Ala	Gly	Gly	Ser	Ser	Thr	Ala	Arg
	115					120						125			
Glu	Gly	Ala	Thr	Ser	Cys	Ser	Ala	Ser	Gly	Ile	Arg	Ala	Gly	Gly	Glu
	130					135					140				
Ala	Gly	Arg	Gly	Met	Pro	Glu	Gly	Arg	Gly	Gly	Pro	Gly	Thr	Glu	Pro
145				150					155					160	
Val	Thr	Val	Ala	Ala	Ala	Ala	Val	Thr	Ala	Ala	Ala	Thr	Val	Val	Pro
			165					170						175	
Val	Ile	Ser	Val	Gly	Ser	Ser	Leu	Tyr	Pro	Gly	Pro	Gly	Leu	Gly	His
		180					185						190		
Gly	His	Ser	Pro	Gly	Leu	His	Pro	Tyr	Thr	Ala	Leu	Gln	Pro	His	Leu
	195					200						205			
Pro	Cys	Ser	Pro	Gln	Tyr	Leu	Thr	His	Pro	Ala	His	Pro	Ala	His	Pro
	210					215					220				
Met	Pro	His	Met	Pro	Arg	Pro	Ala	Val	Phe	Pro	Val	Pro	Ser	Ser	Ala
225				230					235					240	
Tyr	Pro	Gln	Gly	Val	His	Pro	Ala	Phe	Leu	Gly	Ala	Gln	Tyr	Pro	Tyr
			245					250					255		
Ser	Val	Thr	Pro	Pro	Ser	Leu	Ala	Ala	Thr	Ala	Val	Ser	Phe	Pro	Val

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 305 310 315 320
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 325 330 335
 Phe Pro Pro Pro Glu Glu Glu Thr His Ser Gln Pro Val Asn Pro His
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 Ser Leu His His Leu His Ala Ala Tyr Arg Val Gly Met Leu Ala Leu
 355 360 365
 Glu Met Leu Gly Arg Arg Ala His Asn Asp His Pro Asn Asn Phe Ser
 370 375 380
 Arg Ser Pro Pro Tyr Thr Asp Asp Val Lys Trp Leu Leu Gly Leu Ala
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 Ala Lys Leu Gly Val Asn Tyr Val His Gln Phe Cys Val Gly Ala Ala
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 Lys Gly Val Leu Ser Pro Phe Val Leu Gln Glu Ile Val Met Glu Thr
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 Leu Gln Arg Leu Ser Pro Ala His Ala His Asn His Leu Arg Ala Pro
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 Ala Phe His Gln Leu Val Gln Arg Cys Gln Gln Ala Tyr Met Gln Tyr
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 Ile His His Arg Leu Ile His Leu Thr Pro Ala Asp Tyr Asp Asp Phe
 465 470 475 480
 Val Asn Ala Ile Arg Ser Ala Arg Ser Ala Phe Cys Leu Thr Pro Met
 485 490 495
 Gly Met Met Gln Phe Asn Asp Ile Leu Gln Asn Leu Lys Arg Ser Lys
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<210> 6129

<211> 2012

<212> DNA

<213> Homo sapiens

<400> 6129

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120

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<210> 6130

<211> 364

<212> PRT

<213> Homo sapiens

<400> 6130

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Thr Leu Lys Ser Glu Ala Leu Arg Asn Trp Gln Val Tyr Arg Leu Val
      50          55          60
Thr Tyr Ile Phe Val Tyr Glu Asn Pro Ile Ser Leu Leu Cys Gly Ala
      65          70          75          80
Ile Ile Ile Trp Arg Phe Ala Gly Asn Phe Glu Arg Thr Val Gly Thr
      85          90          95
Val Arg His Cys Phe Phe Thr Val Ile Phe Ala Ile Phe Ser Ala Ile
      100         105         110
Ile Phe Leu Ser Phe Glu Ala Val Ser Ser Leu Ser Lys Leu Gly Glu
      115         120         125
Val Glu Asp Ala Arg Gly Phe Thr Pro Val Ala Phe Ala Met Leu Gly
      130         135         140
Val Thr Thr Val Arg Ser Arg Met Arg Arg Ala Leu Val Phe Gly Met
      145         150         155         160
Val Val Pro Ser Val Leu Val Pro Trp Leu Leu Leu Gly Ala Ser Trp
      165         170         175
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      180         185         190
Gly Leu Ala Tyr Gly Leu Thr Tyr Cys Tyr Ser Ile Asp Leu Ser Glu
      195         200         205
Arg Val Ala Leu Lys Leu Asp Gln Thr Phe Pro Phe Ser Leu Met Arg
      210         215         220
Arg Ile Ser Val Phe Lys Tyr Val Ser Gly Ser Ser Ala Glu Arg Arg
      225         230         235         240
Ala Ala Gln Ser Arg Lys Leu Asn Pro Val Pro Gly Ser Tyr Pro Thr
      245         250         255
Gln Ser Cys His Pro His Leu Ser Pro Ser His Pro Val Ser Gln Thr
      260         265         270
Gln His Ala Ser Gly Gln Lys Leu Ala Ser Trp Pro Ser Cys Thr Pro
      275         280         285
Gly His Met Pro Thr Leu Pro Pro Tyr Gln Pro Ala Ser Gly Leu Cys
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      305         310         315         320
Pro Ala Ser Ala Gly Thr Ser Leu Gly Ile Gln Pro Pro Thr Pro Val
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355

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<210> 6131

<211> 3526

<212> DNA

<213> Homo sapiens

<400> 6131

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<212> PRT

<213> Homo sapiens

<400> 6132

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<211> 4156

<212> DNA

<213> Homo sapiens

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<211> 595

<212> PRT

<213> Homo sapiens

<400> 6134

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<210> 6138

<211> 550

<212> PRT

<213> Homo sapiens

<400> 6138

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<210> 6139

<211> 2249

<212> DNA

<213> Homo sapiens

<400> 6139

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<211> 381

<212> PRT

<213> Homo sapiens

<400> 6140

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	260	265
Tyr Trp Val Gly Met Ser Thr Ile Arg Pro Asn Pro Gly Phe Ser Met		270
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<210> 6141

<211> 5651

<212> DNA

<213> Homo sapiens

<400> 6141

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<211> 513

<212> PRT

<213> Homo sapiens

<400> 6142

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 Thr Lys Leu Asn Ala Ile Ser Val Leu Tyr Phe Asn Asp Asn Ser Lys
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 Ile Thr Leu Lys Lys Tyr Arg Asn Met Val Val Arg Ala Cys Gly Tyr
 500 505 510
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<210> 6143

<211> 1137

<212> DNA

<213> Homo sapiens

<400> 6143

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<210> 6144

<211> 141

<212> PRT

<213> Homo sapiens

<400> 6144

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 Ser Gly Ser Arg Gln Ala Trp Val His Pro Pro Ala Gln Pro Arg Thr
 35 40 45
 Ala Gly Pro Glu Leu Gly Gly Gln Gly Ile Pro Ser Pro Gly Cys Ala
 50 55 60
 Cys Gln Arg Gly Glu Ala Gly Gly Gly Gly Asn Ala Val Leu Pro Gln
 65 70 75 80
 Glu Ser Val Leu Arg Ala Ser Ala Val Gly Arg Gly Ala Glu Gly Pro
 85 90 95
 Gly Ala Leu Thr Arg Ser Gly Ser Gly Ala Ala Ser Ala Leu Val Arg
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<210> 6145

<211> 766

<212> DNA

<213> Homo sapiens

<400> 6145

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<210> 6146

<211> 100

<212> PRT

<213> Homo sapiens

<400> 6146

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Ser	Pro	Val	Pro	Arg	Ala	Met	Ser	Ser	Gln	Gln	Gln	Gln	Arg	Gln	Ala
			20					25					30		
Ala	Val	Pro	Thr	Pro	Glu	Ala	Gln	Gln	Gln	Val	Lys	Gln	Pro	Cys	
			35				40				45				
Gln	Pro	Pro	Pro	Val	Lys	Cys	Gln	Glu	Thr	Cys	Ala	Pro	Lys	Thr	Lys
			50			55				60					
Asp	Pro	Cys	Ala	Pro	Gln	Val	Lys	Lys	Gln	Cys	Pro	Pro	Lys	Asp	Thr
65					70					75				80	
Ile	Ile	Pro	Ala	Gln	Gln	Lys	Cys	Pro	Ser	Ala	Gln	Gln	Ala	Ser	Lys
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Ser	Lys	Gln	Lys												
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<210> 6147

<211> 1852

<212> DNA

<213> Homo sapiens

<400> 6147

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 300

tggataaaga aaggaacgga tgtagacgtg gggccatttt tgaactccct tgtacaagaa
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420
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480
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1852

<210> 6148

<211> 410

<212> PRT

<213> Homo sapiens

<400> 6148

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          20           25           30
Gly Trp Ile Lys Lys Gly Thr Asp Val Asp Val Gly Pro Phe Leu Asn
 35           40           45
Ser Leu Val Gln Glu Gly Glu Trp Glu Arg Ala Ala Ala Val Ala Leu
 50           55           60
Phe Asn Leu Asp Ile Arg Arg Ala Ile Gln Ile Leu Asn Glu Gly Ala
65           70           75           80
Ser Ser Glu Lys Gly Asp Leu Asn Leu Asn Val Val Ala Met Ala Leu
          85           90           95
Ser Gly Tyr Thr Asp Glu Lys Asn Ser Leu Trp Arg Glu Met Cys Ser
          100          105          110
Thr Leu Arg Leu Gln Leu Asn Asn Pro Tyr Leu Cys Val Met Phe Ala
          115          120          125
Phe Leu Thr Ser Glu Thr Gly Ser Tyr Asp Gly Val Leu Tyr Glu Asn
          130          135          140
Lys Val Ala Val Arg Asp Arg Val Ala Phe Ala Cys Lys Phe Leu Ser
145          150          155          160
Asp Thr Gln Leu Asn Arg Tyr Ile Glu Lys Leu Thr Asn Glu Met Lys
          165          170          175
Glu Ala Gly Asn Leu Glu Gly Ile Leu Leu Thr Gly Leu Thr Lys Asp
          180          185          190
Gly Val Asp Leu Met Glu Ser Tyr Val Asp Arg Thr Gly Asp Val Gln
          195          200          205
Thr Ala Ser Tyr Cys Met Leu Gln Gly Ser Pro Leu Asp Val Leu Lys
          210          215          220
Asp Glu Arg Val Gln Tyr Trp Ile Glu Asn Tyr Arg Asn Leu Leu Asp
225          230          235          240
Ala Trp Arg Phe Trp His Lys Arg Ala Glu Phe Asp Ile His Arg Ser
          245          250          255
Lys Leu Asp Pro Ser Ser Lys Pro Leu Ala Gln Val Phe Val Ser Cys
          260          265          270
Asn Phe Cys Gly Lys Ser Ile Ser Tyr Ser Cys Ser Ala Val Pro His
          275          280          285
Gln Gly Arg Gly Phe Ser Gln Tyr Gly Val Ser Gly Ser Pro Thr Lys
          290          295          300
Ser Lys Val Thr Ser Cys Pro Gly Cys Arg Lys Pro Leu Pro Arg Cys
305          310          315          320
Ala Leu Cys Leu Ile Asn Met Gly Thr Pro Val Ser Ser Cys Pro Gly
          325          330          335
Gly Thr Lys Ser Asp Glu Lys Val Asp Leu Ser Lys Asp Lys Lys Leu
          340          345          350
Ala Gln Phe Asn Asn Trp Phe Thr Trp Cys His Asn Cys Arg His Gly
          355          360          365
Gly His Ala Gly His Met Leu Ser Trp Phe Arg Asp His Ala Glu Cys
          370          375          380
Pro Val Ser Ala Cys Thr Cys Lys Cys Met Gln Leu Asp Thr Thr Gly

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5332

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 1440
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 1500
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 1800
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<210> 6150

<211> 508

<212> PRT

<213> Homo sapiens

<400> 6150

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Leu	Ser	Ser	Asp	Met	Val	Glu	Lys	Gln	Thr	Gly	Lys	Lys	Asp	Lys	Asp
			20					25					30		
Lys	Val	Ser	Leu	Thr	Lys	Thr	Pro	Lys	Leu	Glu	Arg	Gly	Asp	Gly	Gly
			35				40					45			
Lys	Glu	Val	Arg	Glu	Arg	Ala	Ser	Lys	Arg	Lys	Leu	Pro	Phe	Thr	Ala
	50					55				60					
Gly	Ala	Asn	Gly	Glu	Gln	Lys	Asp	Ser	Asp	Thr	Glu	Lys	Gln	Gly	Pro
65					70					75				80	
Glu	Arg	Lys	Arg	Ile	Lys	Lys	Glu	Pro	Val	Thr	Arg	Lys	Ala	Gly	Leu
			85					90					95		
Leu	Phe	Gly	Met	Gly	Leu	Ser	Gly	Ile	Arg	Ala	Gly	Tyr	Pro	Leu	Ser
			100					105					110		
Glu	Arg	Gln	Gln	Val	Ala	Leu	Leu	Met	Gln	Met	Thr	Ala	Glu	Glu	Ser
		115					120				125				
Ala	Asn	Ser	Pro	Val	Asp	Thr	Thr	Pro	Lys	His	Pro	Ser	Gln	Ser	Thr
	130					135					140				
Val	Cys	Gln	Lys	Gly	Thr	Pro	Asn	Ser	Ala	Ser	Lys	Thr	Lys	Asp	Lys
145					150					155				160	
Leu	Asn	Lys	Arg	Asn	Glu	Arg	Gly	Glu	Thr	Arg	Leu	His	Arg	Ala	Ala
			165					170					175		
Ile	Arg	Gly	Asp	Ala	Arg	Arg	Ile	Lys	Glu	Leu	Ile	Ser	Glu	Gly	Ala
			180					185					190		
Asp	Val	Asn	Val	Lys	Asp	Phe	Ala	Gly	Trp	Thr	Ala	Leu	His	Glu	Ala

195	200	205
Cys Asn Arg Gly Tyr Tyr Asp Val Ala Lys Gln Leu Leu Ala Ala Gly		
210	215	220
Ala Glu Val Asn Thr Lys Gly Leu Asp Asp Asp Thr Pro Leu His Asp		
225	230	235
Ala Ala Asn Asn Gly His Tyr Lys Val Val Lys Leu Leu Leu Arg Tyr		
245	250	255
Gly Gly Asn Pro Gln Gln Ser Asn Arg Lys Gly Glu Thr Pro Leu Lys		
260	265	270
Val Ala Asn Ser Pro Thr Met Val Asn Leu Leu Leu Gly Lys Gly Thr		
275	280	285
Tyr Thr Ser Ser Glu Glu Ser Ser Thr Glu Ser Ser Glu Glu Glu Asp		
290	295	300
Ala Pro Ser Phe Ala Pro Ser Ser Ser Val Asp Gly Asn Asn Thr Asp		
305	310	315
Ser Glu Phe Glu Lys Gly Leu Lys His Lys Ala Lys Asn Pro Glu Pro		
325	330	335
Gln Lys Ala Thr Ala Pro Val Lys Asp Glu Tyr Glu Phe Asp Glu Asp		
340	345	350
Asp Glu Gln Asp Arg Val Pro Pro Val Asp Asp Lys His Leu Leu Lys		
355	360	365
Lys Asp Tyr Arg Lys Glu Thr Lys Ser Asn Ser Phe Ile Ser Ile Pro		
370	375	380
Lys Met Glu Val Lys Ser Tyr Thr Lys Asn Asn Thr Ile Ala Pro Lys		
385	390	395
Lys Ala Ser His Arg Ile Leu Ser Asp Thr Ser Asp Glu Glu Asp Ala		
405	410	415
Ser Val Thr Val Gly Thr Gly Glu Lys Leu Arg Leu Ser Ala His Thr		
420	425	430
Ile Leu Pro Gly Ser Lys Thr Arg Glu Pro Ser Asn Ala Lys Gln Gln		
435	440	445
Lys Glu Lys Asn Lys Val Lys Lys Arg Lys Lys Glu Thr Lys Gly		
450	455	460
Arg Glu Val Arg Phe Gly Lys Arg Ser Xaa Ser Ser Ala Pro Arg Ser		
465	470	475
Arg Arg Ala Ser Pro Gln Arg Val Gly Arg Met Thr Gly Thr Leu Trp		
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Gly Ala Leu Ala Ala Ser Arg Gly Pro Arg Trp Cys		
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<210> 6151

<211> 648

<212> DNA

<213> Homo sapiens

<400> 6151

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240

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<210> 6152

<211> 130

<212> PRT

<213> Homo sapiens

<400> 6152

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			20					25					30		
Glu	Arg	Val	Ala	Phe	Ser	Leu	Phe	Thr	His	Thr	Cys	Thr	Gln	Pro	Leu
		35					40					45			
Ala	Gly	Thr	Val	Asp	Thr	His	Leu	Pro	Ser	Leu	Leu	Pro	Val	Ile	
	50					55				60					
Leu	His	Pro	Leu	Gly	Ala	Ala	Ser	Ala	Gly	Arg	Ala	Leu	Glu	Pro	Lys
65				70					75				80		
Ala	Asp	Pro	His	Thr	Cys	Pro	Tyr	Gly	Arg	Lys	Glu	Ser	Arg	Gly	Glu
			85					90					95		
Lys	Val	Arg	Arg	Gly	Arg	Ala	Lys	Ser	Asn	Ser	Gly	Pro	Asn	Val	Pro
			100				105					110			
Gly	Pro	Pro	Ala	Ala	Pro	Gln	Ser	Leu	Lys	Ser	Gly	Ser	Pro	Ser	Thr
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<210> 6153

<211> 1810

<212> DNA

<213> Homo sapiens

<400> 6153

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<210> 6154

<211> 388

<212> PRT

<213> Homo sapiens

<400> 6154

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          20          25          30
Ser Arg Ala Tyr Arg Phe Thr Gly His Lys Asp Ala Val Thr Cys Val
          35          40          45
Asn Phe Ser Pro Ser Gly His Leu Leu Ala Ser Gly Ser Arg Asp Lys
 50          55          60
Thr Val Arg Ile Trp Val Pro Asn Val Lys Gly Glu Ser Thr Val Phe
 65          70          75          80
Arg Ala His Thr Ala Thr Val Arg Ser Val His Phe Cys Ser Asp Gly
          85          90          95
Gln Ser Phe Val Thr Ala Ser Asp Asp Lys Thr Val Lys Val Trp Ala
          100          105          110
Thr His Arg Gln Lys Phe Leu Phe Ser Leu Ser Gln His Ile Asn Trp
          115          120          125
Val Arg Cys Ala Lys Phe Ser Pro Asp Gly Arg Leu Ile Val Ser Ala
          130          135          140
Ser Asp Asp Lys Thr Val Lys Leu Trp Asp Lys Ser Ser Arg Glu Cys
          145          150          155          160
Val His Ser Tyr Cys Glu His Gly Gly Phe Val Thr Tyr Val Asp Phe
          165          170          175
His Pro Ser Gly Thr Cys Ile Ala Ala Ala Gly Met Asp Asn Thr Val
          180          185          190
Lys Val Trp Asp Val Arg Thr His Arg Leu Leu Gln His Tyr Gln Leu
          195          200          205
His Ser Ala Ala Val Asn Gly Leu Ser Phe His Pro Ser Gly Asn Tyr
          210          215          220
Leu Ile Thr Ala Ser Ser Asp Ser Thr Leu Lys Ile Leu Asp Leu Met
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Glu Gly Arg Leu Leu Tyr Thr Leu His Gly His Gln Gly Pro Ala Thr
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          260          265          270
Asp Glu Gln Val Met Val Trp Lys Ser Asn Phe Asp Ile Val Asp His
          275          280          285
Gly Glu Val Thr Lys Val Pro Arg Pro Pro Ala Thr Leu Ala Ser Ser
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Met Gly Asn Leu Pro Glu Val Asp Phe Pro Val Pro Pro Gly Arg Gly
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Trp Ser Val Glu Ser Val Gln Ser Gln Pro Gln Glu Pro Val Ser Val
          325          330          335
Pro Gln Thr Leu Thr Ser Thr Leu Glu His Ile Val Gly Gln Leu Asp
          340          345          350
Val Leu Thr Gln Thr Val Ser Ile Leu Glu Gln Arg Leu Thr Leu Thr
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<210> 6155
<211> 995
<212> DNA
<213> Homo sapiens

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<210> 6156
<211> 164
<212> PRT
<213> Homo sapiens

<400> 6156
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Asp Leu Thr Ala Ile Cys Asp Ala Ser Glu Ala Cys Val Asn Ala Leu					
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Leu Gly Asn Glu Leu Glu Pro Leu Ala Glu Asp Ile Leu His Gln Ser					
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Pro Asn Met Asn Ala Val Ile Ser Leu Gln Lys Ile Ile Glu Ile Gln					
100		105		110	
Lys Leu Leu Val Ser Leu Trp Lys Arg Ser Gln Pro Cys Glu Val Pro					
115		120		125	
Ser Pro Pro Leu Ile Phe Pro Val Cys Asp Ile Ile Val Tyr Pro Pro					
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<210> 6157

<211> 2135

<212> DNA

<213> Homo sapiens

<400> 6157

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<210> 6158

<211> 455

<212> PRT

<213> Homo sapiens

<400> 6158

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<211> 4310

<212> DNA

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<210> 6160

<211> 551

<212> PRT

<213> Homo sapiens

<400> 6160

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 Gly Thr Tyr Gln Arg Ala Ile Leu Gln Asn His Thr Asp Phe Lys Asp
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 405 410 415
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<210> 6161

<211> 1489

<212> DNA

<213> Homo sapiens

<400> 6161

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<210> 6162

<211> 58

<212> PRT

<213> Homo sapiens

<400> 6162

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 tcttttctcta ggagtctect ctcttccac ccacatggc ggctggcct ggaggggagg
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 713

<210> 6164

<211> 120

<212> PRT

<213> Homo sapiens

<400> 6164

Met	Trp	Val	Thr	Val	Thr	Gln	Trp	Val	Thr	Gly	Ala	Glu	Gln	Gly	Arg
1				5					10					15	
Ala	Gly	Arg	Leu	Lys	Gln	Asn	Leu	Gln	Glu	Lys	Ser	Lys	Gly	Ala	Gln
			20					25					30		
Pro	Leu	Pro	Gly	Lys	Ala	Gly	Leu	Ala	Leu	Leu	Lys	Pro	Gln	Ser	Arg
		35					40					45			
Ser	Asp	Gly	Tyr	Arg	Tyr	Leu	Gly	Lys	Asp	Thr	Val	Asp	Gly	Leu	Asp
	50					55					60				
Ser	Ser	Leu	Leu	Lys	Cys	Thr	Arg	Arg	Cys	Met	Arg	Gly	Phe	Arg	Leu
65				70					75					80	
Pro	Glu	Lys	Gln	Pro	Ser	Lys	Thr	Arg	Val	Ser	Phe	Leu	Glu	Ser	Lys
			85					90					95		
Arg	Lys	Glu	Gly	Ser	Gly	Trp	Leu	His	Trp	Ser	Val	Thr	Arg	Ser	Gly
		100					105						110		
Ala	Phe	Arg	Leu	Lys	Val	Thr	Val								
		115					120								

<210> 6165

<211> 1004

<212> DNA

<213> Homo sapiens

<400> 6165

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 60
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 120
 atccagcggc tcggggacac ggaagagatg ttaagcaaga aacaggagtt cctggagaag
 180
 aaaatcgagc aggagctgac ggccgccaag aagcacggca ccaaaaacaa gcgcgcgggc
 240
 ctccaggcac tgaagcgtaa gaagaggtat gagaagcagc tggcgcagat cgacggcaca
 300
 ttatcaacca tcgagttcca gcgggaggcc ctggagaatg ccaacaccaa caccgaggtg
 360
 ctcaagaaca tgggctatgc cgccaaggcc atgaaggcgg cccatgacaa catggacatc
 420
 gataaagttag atgagttaat gcaggacatt gctgaccagc aagaacttgc agaggagatt
 480

tcaacagcaa ttctgaaacc tgtagggttt ggagaagagt ttgacgagga tgagctcatg
 540
 gcggaattag aagaactaga acaggaggaa ctagacaaga atttgctgga aatcagtgga
 600
 cccgaaacag tccctctacc aaatgttccc tctatagccc taccatcaaa acccgccaag
 660
 aagaaagaag aggaggacga cgacatgaag gaattggaga actgggctgg atccatgtaa
 720
 tggggctccag cgctggctgg gccagacag actgtggtgg cctgcgagc gagcaggcgt
 780
 gtgcgtgtgt ggggcaggca ggatgtggtg caggcaggtt ccatcgcttt cgactctcac
 840
 tccaaagcag tagggccgag ttgctgctca ctctctgcat agcatggtct gcacctggga
 900
 gttggccggg gggagggggg cgagcgggct ggcacgtgcc tgctgtttat aatgttgaat
 960
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 1004

<210> 6166

<211> 239

<212> PRT

<213> Homo sapiens

<400> 6166

Pro Ser Arg Ile Gly Arg Arg Arg Pro Ala Arg Arg Ala Ala Thr Met
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 20 25 30
 Gly Gly Pro Thr Pro Gln Glu Ala Ile Gln Arg Leu Arg Asp Thr Glu
 35 40 45
 Glu Met Leu Ser Lys Lys Gln Glu Phe Leu Glu Lys Lys Ile Glu Gln
 50 55 60
 Glu Leu Thr Ala Ala Lys Lys His Gly Thr Lys Asn Lys Arg Ala Ala
 65 70 75 80
 Leu Gln Ala Leu Lys Arg Lys Lys Arg Tyr Glu Lys Gln Leu Ala Gln
 85 90 95
 Ile Asp Gly Thr Leu Ser Thr Ile Glu Phe Gln Arg Glu Ala Leu Glu
 100 105 110
 Asn Ala Asn Thr Asn Thr Glu Val Leu Lys Asn Met Gly Tyr Ala Ala
 115 120 125
 Lys Ala Met Lys Ala Ala His Asp Asn Met Asp Ile Asp Lys Val Asp
 130 135 140
 Glu Leu Met Gln Asp Ile Ala Asp Gln Gln Glu Leu Ala Glu Glu Ile
 145 150 155 160
 Ser Thr Ala Ile Ser Lys Pro Val Gly Phe Gly Glu Glu Phe Asp Glu
 165 170 175
 Asp Glu Leu Met Ala Glu Leu Glu Glu Glu Gln Glu Glu Leu Asp
 180 185 190
 Lys Asn Leu Leu Glu Ile Ser Gly Pro Glu Thr Val Pro Leu Pro Asn
 195 200 205
 Val Pro Ser Ile Ala Leu Pro Ser Lys Pro Ala Lys Lys Lys Glu Glu
 210 215 220
 Glu Asp Asp Asp Met Lys Glu Leu Glu Asn Trp Ala Gly Ser Met

225

230

235

<210> 6167

<211> 1220

<212> DNA

<213> Homo sapiens

<400> 6167

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120
tcaaacttgt cttaatgaga tggaagtgtt ggatcaaaca ctgattgagc tgttctatgt
180
cctccacttc cccagtgcct tctctcctcc cgggtctgcg cggacgcggc ctccttacct
240
catttgcctt cgccccctcc cgctccctcta cgcgttttgg tccctgtttg gtgctttctg
300
tttgacgcta cggcagtgag tatgtatgtg acggaccccg agtcacccgc ggctgggac
360
ccctgcctac cctccgtctc gccagccgag ctgtggaact agcgcgtgcc ccctcgccga
420
cctcggcgtc tccggtccgc ccctcacttg tgggtggggcg cagctcctgg tccctcagct
480
gcgcgcgcgc ccacgcggcc gggctgcggg tctagggggg ccgcatctcc ctggctttcc
540
aagggtctaa gtcgtgatc tagggcggtt gggcgctccag ggctcgggtg ggggtggcgt
600
gtctgccctt tttatctccc cgcaaggccc ccagtcttct aggggaagcca gtcagtgaag
660
cgcgagggtc cgggcgcgcc gagagagagt ccagtctttg aggaccgagt agtcctgggc
720
cacctcccgc ctctgctgtc agaagcagca gctgccgcg tggaatocaa aatttcggga
780
gctgtgaccc tttcctcatg taaaacgagt agtcttggac gatctgggca taggaaccaa
840
tcagaaacaa tcgcttcagc aatcaagacc attgttcac atggagggaac ccatggatac
900
ctctgagcct ctatctgcat taccattcac tgggcagcag tcttttgagc caagtggcaa
960
atttggacag tatccatcga tgcagatgaa ccacatccag gcactgggga agtggaggac
1020
atagaacagc tcaatcagtg tttgatccaa cacttccatc tcattaagac aagtttgatt
1080
tttctttgct ttttatttca tggaatacat gagaatctct taactgttgg agtttccaag
1140
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1220

<210> 6168

<211> 90

<212> PRT

<213> Homo sapiens

<400> 6168

Ala	Lys	Trp	Gln	Ile	Trp	Thr	Val	Ser	Ile	Asp	Ala	Asp	Glu	Pro	His
1				5					10					15	
Pro	Gly	Thr	Gly	Glu	Val	Glu	Asp	Ile	Glu	Gln	Leu	Asn	Gln	Cys	Leu
			20					25					30		
Ile	Gln	His	Phe	His	Leu	Ile	Lys	Thr	Ser	Leu	Ile	Phe	Leu	Cys	Phe
		35					40					45			
Leu	Phe	His	Gly	Ile	His	Glu	Asn	Leu	Leu	Thr	Val	Gly	Val	Ser	Lys
	50					55					60				
Glu	Ala	Tyr	Leu	Met	Thr	Ser	Val	Asn	Gly	Lys	Asn	Lys	Thr	Lys	Met
65					70					75					80
Leu	Tyr	Gly	Gln	Ser	His	Lys	Gly	Lys	Asp						
				85					90						

<210> 6169

<211> 720

<212> DNA

<213> Homo sapiens

<400> 6169

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120
cagtgaacccc aggcttttta tggctgtgaa acacgttaaa atttcagggt aagacgtgac
180
cttttgaggt gactataact gaagattgct ttacagaagc caaaaaagg tttttgagtc
240
atgatgcaag aatctgggac tgagacaaaa agtaacgggt cagccatcca gaatgggtcg
300
ggcggcagca accacttact agagtgcggc ggtcttcggg aggggcggtc caacggagag
360
acgccggccg tggacatcgg ggcagctgac ctgcccacg ccagcagca gcagcaacag
420
tggcatctca taaaccatca gccctctagg agtcccagca gttggcttaa gagactaatt
480
tcaagccctt gggagttgga agtcctgcag gtcccttggt gggagcagtt gctgagacga
540
agatgagtgg acctgtgtgt cagcctaacc cttccccatt ttgaataaaa ttattctttg
600
gagaaatggt tcccactgct ttcatgcaaa aataaaaatt aaacgaaaaa cagcttaagc
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ctgtgaagaa ggaaatactg agctagccag caaaagagag aaagaagagg aggggagagg
720

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<210> 6170

<211> 101

<212> PRT

<213> Homo sapiens

<400> 6170

Met Met Gln Glu Ser Gly Thr Glu Thr Lys Ser Asn Gly Ser Ala Ile

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Gln	Asn	Gly	Ser	Gly	Gly	Ser	Asn	His	Leu	Leu	Glu	Cys	Gly	Leu
			20					25					30	
Arg	Glu	Gly	Arg	Ser	Asn	Gly	Glu	Thr	Pro	Ala	Val	Asp	Ile	Gly
		35					40					45		Ala
Ala	Asp	Leu	Ala	His	Ala	Gln	Gln	Gln	Gln	Gln	Gln	Trp	His	Leu
	50					55				60				Ile
Asn	His	Gln	Pro	Ser	Arg	Ser	Pro	Ser	Ser	Trp	Leu	Lys	Arg	Leu
65					70					75				80
Ser	Ser	Pro	Trp	Glu	Leu	Glu	Val	Leu	Gln	Val	Pro	Cys	Gly	Glu
			85					90					95	Gln
Leu	Leu	Arg	Arg	Arg										
			100											

<210> 6171

<211> 1130

<212> DNA

<213> Homo sapiens

<400> 6171

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120
tatgaggtga acccacggac cacagagatt ttacatcacc tttcagaacg caacagggtc
180
cgggacaggg atgtctacct ggtaatagag gacttgaagc agaaagcaag tgaatcacgag
240
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360
acaaaggata cctcgctagc tagttttatc cctgcagtga atgatttgac ctctgatctc
420
tttcgtacca aatccaaaag tgaagaaatc aagattgaac tggaaaaaact tgaaaaaaat
480
ttaactgcaa ctttagtatt agaaaaatgt ctacaagagg atgtcaagaa agcagagttg
540
catctgtcta cagaaagggc caaagttgat aatcgtcgtc agaacatgga ctttctaaaa
600
gcaaagtcag aggaattcag atttggaatc aaggctgcag aggagcaact ttcagccaga
660
ggcatggatg cttctctgtc tcatcagtc ttagtagcac tatcagagaa actggcaaga
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780
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840
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900
tttccctaac aaagtaaatt gaataggact ttacagagtt ctttttcctc ttggcatttc
960
ctaataacaa aactttctgt gttcttagat tacagaatat cataattgat agaatatggt
1020

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ttcttactgt gtgttgcat tttgtgccca aatacatagt tttcatatta aaaagccttt
 1080
 tctcttataaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa
 1130

<210> 6172
 <211> 292
 <212> PRT
 <213> Homo sapiens

<400> 6172
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 20 25 30
 Phe Gly Asp His Pro Ile Pro Gln Tyr Glu Val Asn Pro Arg Thr Thr
 35 40 45
 Glu Ile Leu His His Leu Ser Glu Arg Asn Arg Val Arg Asp Arg Asp
 50 55 60
 Val Tyr Leu Val Ile Glu Asp Leu Lys Gln Lys Ala Ser Glu Tyr Glu
 65 70 75 80
 Ser Glu Ala Lys Tyr Leu Gln Asp Leu Leu Met Glu Ser Val Asn Phe
 85 90 95
 Ser Pro Ala Asn Leu Ser Ser Thr Gly Ser Arg Tyr Leu Asn Ala Leu
 100 105 110
 Val Asp Ser Ala Val Ala Leu Glu Thr Lys Asp Thr Ser Leu Ala Ser
 115 120 125
 Phe Ile Pro Ala Val Asn Asp Leu Thr Ser Asp Leu Phe Arg Thr Lys
 130 135 140
 Ser Lys Ser Glu Glu Ile Lys Ile Glu Leu Glu Lys Leu Glu Lys Asn
 145 150 155 160
 Leu Thr Ala Thr Leu Val Leu Glu Lys Cys Leu Gln Glu Asp Val Lys
 165 170 175
 Lys Ala Glu Leu His Leu Ser Thr Glu Arg Ala Lys Val Asp Asn Arg
 180 185 190
 Arg Gln Asn Met Asp Phe Leu Lys Ala Lys Ser Glu Glu Phe Arg Phe
 195 200 205
 Gly Ile Lys Ala Ala Glu Glu Gln Leu Ser Ala Arg Gly Met Asp Ala
 210 215 220
 Ser Leu Ser His Gln Ser Leu Val Ala Leu Ser Glu Lys Leu Ala Arg
 225 230 235 240
 Leu Lys Gln Gln Thr Ile Pro Leu Lys Lys Lys Leu Glu Ser Tyr Leu
 245 250 255
 Asp Leu Met Pro Asn Pro Ser Leu Ala Gln Val Lys Ile Glu Glu Ala
 260 265 270
 Lys Arg Glu Leu Asp Ser Ile Glu Ala Glu Leu Thr Arg Arg Val Asp
 275 280 285
 Met Met Glu Leu
 290

<210> 6173
 <211> 1483
 <212> DNA
 <213> Homo sapiens

<400> 6173

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120
caaggcctgt tgatgcagcc atgggcgtgg ctacagcttg cagagaactc cctcttggcc
180
aaggttttta tcaccaagca gggctatgcc ttgttggttt cagatcttca acagggtgtg
240
catgaacagg tggacactag tgtggtcagc cagcgagcca aggagctgaa caagcggctc
300
actgctcctc ctgcagcttt cctctgtcat ttggataatc tccttcgccc attgttgaag
360
gacgtgctc accctagcga agctacctc tcctgtgatt gtgtggcaga tgcaactgatt
420
ctacgggtgc gaagtgaact ctctggcctc ccttctatt ggaatttcca ctgcatgcta
480
gctagtcctt ccctggctc ccaacatttg attcgtctc tgatgggcat gactctggca
540
ttacagtgcc aagtgagga gctagcaacg ttacttcata tgaaagacct agagatccaa
600
gactaccagg agagtggggc tacgctgatt cgagatcgat tgaagacaga accatttgaa
660
gaaaattcct tcttgaaca atttatgata gagaaactgc cagaggcatg cagcattggt
720
gatggaaagc cctttgtcat gaatctgcag gatctgtata tggcagtcac cacacaagag
780
gtccaagtgg gacagaagca tcaaggcgct ggagatctc atacctcaa cagtgttcc
840
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900
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960
ctgtcaaagg tcaagaggaa gaatccaagg ggtctcttca gttaatctgt tgtggcctca
1020
gctgctgagg atggacttgg agaatagtt ccaagcttca ccttgaaaga agcttacatg
1080
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1140
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1200
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1260
tggactttag gtatataggg caagtcagca agaaagcacc acacactcag gaagccttgt
1320
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1380
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1440
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1483

<210> 6174

<211> 299

<212> PRT

<213> Homo sapiens

<400> 6174

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Met Glu Glu Leu Glu Gln Gly Leu Leu Met Gln Pro Trp Ala Trp Leu
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Gln Leu Ala Glu Asn Ser Leu Leu Ala Lys Val Phe Ile Thr Lys Gln
      20          25          30
Gly Tyr Ala Leu Leu Val Ser Asp Leu Gln Gln Val Trp His Glu Gln
      35          40          45
Val Asp Thr Ser Val Val Ser Gln Arg Ala Lys Glu Leu Asn Lys Arg
      50          55          60
Leu Thr Ala Pro Pro Ala Ala Phe Leu Cys His Leu Asp Asn Leu Leu
      65          70          75          80
Arg Pro Leu Leu Lys Asp Ala Ala His Pro Ser Glu Ala Thr Phe Ser
      85          90          95
Cys Asp Cys Val Ala Asp Ala Leu Ile Leu Arg Val Arg Ser Glu Leu
      100          105          110
Ser Gly Leu Pro Phe Tyr Trp Asn Phe His Cys Met Leu Ala Ser Pro
      115          120          125
Ser Leu Val Ser Gln His Leu Ile Arg Pro Leu Met Gly Met Ser Leu
      130          135          140
Ala Leu Gln Cys Gln Val Arg Glu Leu Ala Thr Leu Leu His Met Lys
      145          150          155          160
Asp Leu Glu Ile Gln Asp Tyr Gln Glu Ser Gly Ala Thr Leu Ile Arg
      165          170          175
Asp Arg Leu Lys Thr Glu Pro Phe Glu Glu Asn Ser Phe Leu Glu Gln
      180          185          190
Phe Met Ile Glu Lys Leu Pro Glu Ala Cys Ser Ile Gly Asp Gly Lys
      195          200          205
Pro Phe Val Met Asn Leu Gln Asp Leu Tyr Met Ala Val Thr Thr Gln
      210          215          220
Glu Val Gln Val Gly Gln Lys His Gln Gly Ala Gly Asp Pro His Thr
      225          230          235          240
Ser Asn Ser Ala Ser Leu Gln Gly Ile Asp Ser Gln Cys Val Asn Gln
      245          250          255
Pro Glu Gln Leu Val Ser Ser Ala Pro Thr Leu Ser Ala Pro Glu Lys
      260          265          270
Glu Ser Thr Gly Thr Ser Gly Pro Leu Gln Arg Pro Gln Leu Ser Lys
      275          280          285
Val Lys Arg Lys Asn Pro Arg Gly Leu Phe Ser
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<210> 6175

<211> 349

<212> DNA

<213> Homo sapiens

<400> 6175

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120

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aaaactgttc agtttggtgg aactgtgaca gaagtcttgc tgaagtacaa aaaggggtgaa
 180
 acaaatgact ttgagttggt gaagaaccag ctgtagatc cagacataaa gagattgcct
 240
 tggttgaata gaagtcaaac agtagtgga gagtatttgg cttttcttgg taatcttgta
 300
 tcagcacaga ctgttttcct cagaccgtgt ctcagcatga ttgcttccc
 349

<210> 6176

<211> 90

<212> PRT

<213> Homo sapiens

<400> 6176

Met	Arg	Ala	Leu	Glu	Asn	Asp	Phe	Phe	Asn	Ser	Pro	Pro	Arg	Lys	Thr
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Val	Gln	Phe	Gly	Gly	Thr	Val	Thr	Glu	Val	Leu	Leu	Lys	Tyr	Lys	Lys
			20					25					30		
Gly	Glu	Thr	Asn	Asp	Phe	Glu	Leu	Leu	Lys	Asn	Gln	Leu	Leu	Asp	Pro
			35				40					45			
Asp	Ile	Lys	Arg	Leu	Pro	Trp	Leu	Asn	Arg	Ser	Gln	Thr	Val	Val	Glu
	50					55				60					
Glu	Tyr	Leu	Ala	Phe	Leu	Gly	Asn	Leu	Val	Ser	Ala	Gln	Thr	Val	Phe
65				70					75					80	
Leu	Arg	Pro	Cys	Leu	Ser	Met	Ile	Ala	Ser						
			85						90						

<210> 6177

<211> 1536

<212> DNA

<213> Homo sapiens

<400> 6177

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 120
 ttctagcttt ctgtctctat gggtagctca gtggagtcac tgggcgaatg ggccatgctg
 180
 tttgccagtg gaggtttcca ggtgaaactc tatgacattg agcaacagca gataaggaac
 240
 gccctggaaa acatcagaaa ggagatgaag ttgctggagc aggcagggtc tctgaaaggc
 300
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 360
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 420
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 480
 tgtctcatgc cttccaagtt gtttgctggc ttggtccatg tgaagcaatg catcgtggct
 540
 catectgtga atccgccata ctacatcccg ctgggttgagc tgggtcccca cccggagagc
 600

gccctacga cagtggacag aacccacgcc ctgatgaaga agattgganc agtgccecat
 660
 gcgagtccag aaggagggtgg ccggcttcgt tctgaaccgc ctgcaatatg caatcatcag
 720
 cgaggcctgg cggttagtgg aggaaggaat ncgtgtctcc tagtgacctg gnaccttgtc
 780
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 840
 aatgcagaag gtatgttaag ctactgcgac agatacagcg aaggcataaa acatgtccta
 900
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 960
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 1020
 gagtgcctca tgagactcgc caagttgaag agtcaagtgc agccccagtg aatttcttgt
 1080
 aatgcagctt ccactcctct cattggaggc cctatttggg aacactgcaa gcccttaatc
 1140
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 1440
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<210> 6178

<211> 310

<212> PRT

<213> Homo sapiens

<400> 6178

Met	Gly	Thr	Ser	Val	Glu	Ser	Leu	Gly	Glu	Trp	Ala	Met	Leu	Phe	Ala
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Ser	Gly	Gly	Phe	Gln	Val	Lys	Leu	Tyr	Asp	Ile	Glu	Gln	Gln	Gln	Ile
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Thr	Ser	Cys	Leu	Met	Pro	Ser	Lys	Leu	Phe	Ala	Gly	Leu	Val	His	Val

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 Arg Thr His Ala Leu Met Lys Lys Ile Gly Xaa Val Pro His Ala Ser
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 180 185 190
 His Gln Arg Gly Leu Ala Ala Ser Gly Gly Arg Asn Xaa Cys Leu Leu
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 Val Thr Trp Xaa Leu Val Met Ser Glu Gly Leu Gly Met Arg Tyr Ala
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 Phe Ile Gly Pro Leu Glu Thr Met His Leu Asn Ala Glu Gly Met Leu
 225 230 235 240
 Ser Tyr Cys Asp Arg Tyr Ser Glu Gly Ile Lys His Val Leu Gln Thr
 245 250 255
 Phe Gly Pro Ile Pro Glu Phe Ser Arg Ala Thr Ala Glu Lys Val Asn
 260 265 270
 Gln Asp Met Cys Met Lys Val Pro Asp Asp Pro Glu His Leu Ala Ala
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<210> 6179

<211> 2940

<212> DNA

<213> Homo sapiens

<400> 6179

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<210> 6180

<211> 751

<212> PRT

<213> Homo sapiens

<400> 6180

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			20					25					30		
Trp	Arg	Xaa	Tyr	Leu	Thr	Asp	Glu	Phe	Ala	Lys	Gly	Arg	Lys	Val	Ala
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Asp	Leu	Tyr	Glu	Leu	Val	Gln	Tyr	Ala	Gly	Asn	Ile	Ile	Pro	Arg	Leu
	50				55					60					
Tyr	Leu	Leu	Ile	Thr	Val	Gly	Val	Val	Tyr	Val	Lys	Ser	Phe	Pro	Gln
65				70					75					80	
Ser	Arg	Lys	Asp	Ile	Leu	Lys	Asp	Leu	Val	Glu	Met	Cys	Arg	Gly	Val
			85					90					95		
Gln	His	Pro	Leu	Arg	Gly	Leu	Phe	Leu	Arg	Asn	Tyr	Leu	Leu	Gln	Cys
		100						105					110		
Thr	Arg	Asn	Ile	Leu	Pro	Asp	Glu	Gly	Glu	Pro	Thr	Asp	Glu	Glu	Thr
		115				120					125				
Thr	Gly	Asp	Ile	Ser	Asp	Ser	Met	Asp	Phe	Val	Leu	Leu	Asn	Phe	Ala
	130				135					140					
Glu	Met	Asn	Lys	Leu	Trp	Val	Arg	Met	Gln	His	Gln	Gly	His	Ser	Arg
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Asp	Arg	Glu	Lys	Arg	Glu	Arg	Glu	Arg	Gln	Glu	Leu	Arg	Ile	Leu	Val
			165					170					175		
Gly	Thr	Asn	Leu	Val	Arg	Leu	Ser	Xaa	Ser	Trp	Arg	Cys	Lys	Cys	Gly
		180						185				190			
Thr	Leu	Gln	Gln	Ile	Val	Leu	Thr	Gly	Ile	Leu	Glu	Gln	Val	Val	Asn

195	200	205
Cys Arg Asp Ala Leu Ala Gln Glu Tyr Leu Met Glu Cys Ile Ile Gln		
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Val Phe Pro Asp Glu Phe His Leu Gln Thr Leu Asn Pro Phe Leu Arg		
225	230	235
Ala Cys Ala Glu Leu His Gln Asn Val Asn Val Lys Asn Ile Ile Ile		
245	250	255
Ala Leu Ile Asp Arg Leu Ala Leu Phe Ala His Arg Glu Asp Gly Pro		
260	265	270
Gly Ile Pro Ala Asp Ile Lys Leu Phe Asp Ile Phe Ser Gln Gln Val		
275	280	285
Ala Thr Val Ile Gln Ser Arg Gln Asp Met Pro Ser Glu Asp Val Val		
290	295	300
Ser Leu Gln Val Ser Leu Ile Asn Leu Ala Met Lys Cys Tyr Pro Asp		
305	310	315
Arg Val Asp Tyr Val Asp Lys Val Leu Glu Thr Thr Val Glu Ile Phe		
325	330	335
Asn Lys Leu Asn Leu Glu His Ile Ala Thr Ser Ser Ala Val Ser Lys		
340	345	350
Glu Leu Thr Arg Leu Leu Lys Ile Pro Val Asp Thr Tyr Asn Asn Ile		
355	360	365
Leu Thr Val Leu Lys Leu Lys His Phe His Pro Leu Phe Glu Tyr Phe		
370	375	380
Asp Tyr Glu Ser Arg Lys Ser Met Ser Cys Tyr Val Leu Ser Asn Val		
385	390	395
Leu Asp Tyr Asn Thr Glu Ile Val Ser Gln Asp Gln Val Asp Ser Ile		
405	410	415
Met Asn Leu Val Ser Thr Leu Ile Gln Asp Gln Pro Asp Gln Pro Val		
420	425	430
Glu Asp Pro Asp Pro Glu Asp Phe Ala Asp Glu Gln Ser Leu Val Gly		
435	440	445
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450	455	460
Ile Leu Asn Thr Ala Arg Lys His Phe Gly Ala Gly Gly Asn Gln Arg		
465	470	475
Ile Arg Phe Thr Leu Pro Pro Leu Val Phe Ala Ala Tyr Gln Leu Ala		
485	490	495
Phe Arg Tyr Lys Glu Asn Ser Lys Trp Met Thr Asn Gly Lys Arg Asn		
500	505	510
Ala Arg Arg Phe Phe His Leu Pro Xaa Gln Thr Ile Ser Ala Leu Ile		
515	520	525
Lys Ala Glu Leu Ala Glu Leu Pro Leu Arg Leu Phe Leu Gln Gly Ala		
530	535	540
Leu Ala Ala Gly Glu Ile Gly Phe Glu Asn His Glu Thr Val Ala Tyr		
545	550	555
Glu Phe Met Ser Gln Ala Phe Ser Leu Tyr Glu Asp Glu Ile Ser Asp		
565	570	575
Ser Lys Ala Gln Leu Ala Ala Ile Thr Leu Ile Ile Gly Thr Phe Glu		
580	585	590
Arg Met Lys Cys Phe Ser Glu Glu Asn His Glu Pro Leu Arg Thr Gln		
595	600	605
Cys Ala Leu Ala Ala Ser Lys Leu Leu Lys Lys Pro Asp Gln Gly Arg		
610	615	620
Ala Glu His Leu Cys Thr Ser Leu Trp Ser Gly Arg Asn Thr Asp Lys		

625		630		635		640									
Asn	Gly	Glu	Glu	Leu	His	Gly	Gly	Lys	Arg	Val	Met	Glu	Cys	Leu	Lys
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Lys	Ala	Leu	Lys	Ile	Ala	Asn	Gln	Cys	Met	Asp	Pro	Ser	Leu	Gln	Val
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Gln	Leu	Phe	Ile	Glu	Ile	Leu	Asn	Arg	Tyr	Ile	Tyr	Phe	Tyr	Glu	Lys
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	690					695				700					
Ile	Arg	Glu	Asp	Leu	Pro	Asn	Leu	Glu	Ser	Ser	Glu	Glu	Thr	Glu	Gln
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Ile	Asn	Lys	His	Phe	His	Asn	Thr	Leu	Glu	His	Leu	Arg	Leu	Arg	Arg
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Glu	Ser	Pro	Glu	Ser	Glu	Gly	Pro	Ile	Tyr	Glu	Gly	Leu	Ile	Leu	
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<210> 6181

<211> 1135

<212> DNA

<213> Homo sapiens

<400> 6181

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 180
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 1020
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<210> 6182

<211> 236

<212> PRT

<213> Homo sapiens

<400> 6182

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		20					25						30		
Glu	Val	Phe	Phe	Leu	Pro	Asp	Leu	Pro	Thr	Thr	Pro	Tyr	Phe	Ser	Arg
		35					40					45			
Asp	Ala	Gln	Lys	His	Asp	Val	Glu	Val	Leu	Glu	Arg	Asn	Phe	Gln	Thr
	50					55				60					
Ile	Leu	Cys	Glu	Phe	Glu	Thr	Leu	Tyr	Lys	Ala	Phe	Ser	Asn	Cys	Ser
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Leu	Pro	Gln	Gly	Trp	Lys	Met	Asn	Ser	Thr	Pro	Ser	Gly	Glu	Trp	Phe
			85						90					95	
Thr	Phe	Tyr	Leu	Val	Asn	Gln	Gly	Val	Cys	Val	Pro	Arg	Asn	Cys	Arg
			100					105					110		
Lys	Cys	Pro	Arg	Thr	Tyr	Arg	Leu	Leu	Gly	Ser	Leu	Arg	Thr	Cys	Ile
		115					120					125			
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	130					135					140				
Thr	Val	Ile	Thr	Glu	His	Tyr	Gly	Pro	Thr	Asn	Ile	Arg	Ile	Arg	Cys
145					150					155				160	
His	Leu	Gly	Leu	Lys	Thr	Pro	Asn	Gly	Cys	Glu	Leu	Val	Val	Gly	Gly
			165						170					175	
Glu	Pro	Gln	Cys	Trp	Ala	Glu	Gly	Arg	Cys	Leu	Leu	Phe	Asp	Asp	Ser
		180						185					190		
Phe	Leu	His	Ala	Ala	Phe	His	Glu	Gly	Ser	Ala	Glu	Asp	Gly	Pro	Arg
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Val	Val	Phe	Met	Val	Asp	Leu	Trp	His	Pro	Asn	Val	Ala	Ala	Ala	Glu
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<210> 6183

<211> 2530

<212> DNA

<213> Homo sapiens

<400> 6183

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<210> 6184

<211> 308

<212> PRT

<213> Homo sapiens

<400> 6184

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 35 40 45
 Arg Gly Arg Gly Arg Gly Arg Gly Arg Gly Arg Gly Arg Gly
 50 55 60
 Ala Arg Gly Gly Lys Ala Glu Asp Lys Glu Trp Met Pro Val Thr Lys
 65 70 75 80
 Leu Gly Arg Leu Val Lys Asp Met Lys Ile Lys Ser Leu Glu Glu Ile
 85 90 95
 Tyr Leu Phe Ser Leu Pro Ile Lys Glu Ser Glu Ile Ile Asp Phe Phe
 100 105 110
 Leu Gly Ala Ser Leu Lys Asp Glu Val Leu Lys Ile Met Pro Val Gln
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<212> DNA
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<211> 133

<212> PRT

<213> Homo sapiens

<400> 6186

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			20					25					30		
Gly	Tyr	Ile	Cys	Arg	Ile	Cys	His	Lys	Phe	Tyr	His	Ser	Asn	Ser	Gly
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	50					55					60				
Lys	Tyr	Lys	Ala	Ala	Lys	Asn	Pro	Ser	Pro	Thr	Thr	Arg	Pro	Val	Ser
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Ser	Ser	Gly	Arg	Pro	Pro	Ser	Gln	Pro	Asn	Thr	Gln	Asp	Lys	Thr	Pro
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Ser	Lys	Val	Thr	Ala	Arg	Pro	Ser	Gln	Pro	Pro	Leu	Pro	Arg	Arg	Ser
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<210> 6187

<211> 909

<212> DNA

<213> Homo sapiens

<400> 6187

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<210> 6188

<211> 227

<212> PRT

<213> Homo sapiens

<400> 6188

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 Glu Ala Leu Leu Asp Glu Asp Thr Leu Phe Cys Gln Gly Leu Glu Val
 35 40 45
 Phe Tyr Pro Glu Leu Gly Asn Ile Gly Cys Lys Val Val Pro Asp Cys
 50 55 60
 Asn Asn Tyr Arg Gln Lys Ile Thr Ser Trp Met Glu Pro Ile Val Lys
 65 70 75 80
 Phe Pro Gly Ala Val Tyr Gly Ala Thr Tyr Ile Leu Val Met Val Asp
 85 90 95
 Pro Asp Ala Pro Ser Arg Ala Glu Pro Arg Gln Arg Phe Trp Arg His
 100 105 110
 Trp Leu Val Thr Asp Ile Lys Gly Ala Asp Leu Lys Lys Gly Lys Ile
 115 120 125
 Gln Gly Gln Glu Leu Ser Ala Tyr Gln Ala Pro Ser Pro Pro Ala His
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 Ser Gly Phe His Arg Tyr Gln Phe Phe Val Tyr Leu Gln Glu Gly Lys
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<213> Homo sapiens
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<211> 576

<212> PRT

<213> Homo sapiens

<400> 6190

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 35           40           45
Asn Asn Leu Asn Val Glu Glu Asn Ser Ser Gly Asp Gln Arg Arg Ala
 50           55           60
Pro Leu Ala Ala Gly Thr Trp Arg Ser Ala Pro Val Pro Val Thr Thr
 65           70           75           80
Gln Asn Pro Pro Gly Ala Pro Pro Asn Val Leu Trp Gln Thr Pro Leu
           85           90           95
Ala Trp Gln Asn Pro Ser Gly Trp Gln Asn Gln Thr Ala Arg Gln Thr
           100          105          110
Pro Pro Ala Arg Gln Ser Pro Pro Ala Arg Gln Thr Pro Pro Ala Trp
 115          120          125
Gln Thr Gln Asn Pro Val Ala Trp Gln Asn Pro Val Ile Trp Pro Asn
 130          135          140
Pro Val Ile Trp Gln Asn Pro Val Ile Trp Pro Asn Pro Ile Val Trp
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           165          170          175
Gly Trp Gln Thr Pro Pro Gly Trp Gln Thr Pro Pro Gly Trp Gln Gly
           180          185          190
Pro Pro Asp Trp Gln Gly Pro Pro Asp Trp Pro Leu Pro Pro Asp Trp
 195          200          205
Pro Leu Pro Pro Asp Trp Pro Leu Pro Thr Asp Trp Pro Leu Pro Pro
 210          215          220
Asp Trp Ile Pro Ala Asp Trp Pro Ile Pro Pro Asp Trp Gln Asn Leu
 225          230          235          240
Arg Pro Ser Pro Asn Leu Arg Pro Ser Pro Asn Ser Arg Ala Ser Gln
           245          250          255
Asn Pro Gly Ala Ala Gln Pro Arg Asp Val Ala Leu Leu Gln Glu Arg
 260          265          270
Ala Asn Lys Leu Val Lys Tyr Leu Met Leu Lys Asp Tyr Thr Lys Val
 275          280          285
Pro Ile Lys Arg Ser Glu Met Leu Arg Asp Ile Ile Arg Glu Tyr Thr
 290          295          300
Asp Val Tyr Pro Glu Ile Ile Glu Arg Ala Cys Phe Val Leu Glu Lys
 305          310          315          320
Lys Phe Gly Ile Gln Leu Lys Glu Ile Asp Lys Glu Glu His Leu Tyr
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Lys Asp Thr Pro Lys Leu Gly Leu Leu Leu Val Ile Leu Gly Val Ile

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 Tyr Arg Arg Val Pro Asn Ser Asn Pro Pro Glu Tyr Glu Phe Leu Trp
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 Gly Leu Arg Ser Tyr His Glu Thr Ser Lys Met Lys Val Leu Arg Phe
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 Ile Ala Glu Val Gln Lys Arg Asp Pro Arg Asp Trp Thr Ala Gln Phe
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<210> 6191

<211> 3021

<212> DNA

<213> Homo sapiens

<400> 6191

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<212> PRT

<213> Homo sapiens

<400> 6192

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			20					25					30		
Asp	Asp	Thr	His	Tyr	Phe	Val	Met	Thr	Ala	Lys	Lys	Gln	Cys	Leu	Leu
			35					40					45		
Arg	Leu	Gly	Val	Leu	Arg	Gln	Asp	Trp	Pro	Asp	Thr	Asn	Arg	Leu	Leu
			50				55					60			
Gly	Ser	Ala	Asn	Val	Val	Thr	Glu	Ala	Leu	Gln	Arg	Phe	Thr	Arg	Ala
65				70					75					80	
Ala	Ala	Asp	Phe	Ala	Thr	His	Gly	Lys	Leu	Gly	Lys	Leu	Glu	Phe	Ala
			85					90					95		
Gln	Asp	Ala	His	Gly	Gln	Pro	Asp	Val	Ser	Ala	Phe	Asp	Phe	Thr	Ser
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Met	Met	Arg	Ala	Glu	Ser	Ser	Ala	Arg	Val	Gln	Glu	Lys	His	Gly	Ala
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Glu Asn Met His Arg Asn Val Ala Gln Tyr Gly Leu Asp Pro Ala Thr
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Arg Tyr Pro Asn Leu Asn Leu Arg Ala Val Thr Pro Asn Gln Val Arg
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His Val Ser Asp Leu Ser Ser Ser Trp Ala Asp Gly Leu Ala Leu Cys
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Ala Leu Val Tyr Arg Leu Gln Pro Gly Leu Leu Glu Pro Ser Glu Leu
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Gln Gly Leu Gly Ala Leu Glu Ala Thr Ala Trp Ala Leu Lys Val Ala
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Thr Leu Gln Arg Ser Arg Ala Lys Asp Leu Leu Gln Glu Asn Ala Glu
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Asp Ala Gly Gly Lys Lys Leu Arg Leu Glu Met Glu Ala Glu Thr Pro
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Ser Thr Glu Val Pro Pro Asp Pro Glu Pro Gly Val Pro Leu Thr Pro
          420          425          430
Pro Ser Gln His Gln Glu Ala Gly Ala Gly Asp Leu Cys Ala Leu Cys
          435          440          445
Gly Glu His Leu Tyr Val Leu Glu Arg Leu Cys Val Asn Gly His Phe
          450          455          460
Phe His Arg Ser Cys Phe Arg Cys His Thr Cys Glu Ala Thr Leu Trp
          465          470          475          480
Pro Gly Gly Tyr Glu Gln His Pro Gly Asp Gly His Phe Tyr Cys Leu
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Gln His Leu Pro Gln Thr Asp His Lys Ala Glu Gly Ser Asp Arg Gly
          500          505          510
Pro Glu Ser Pro Glu Leu Pro Thr Pro Ser Glu Asn Ser Met Pro Pro
          515          520          525
Gly Leu Ser Thr Pro Thr Ala Ser Gln Glu Gly Ala Gly Pro Val Pro
          530          535          540
Asp Pro Ser Gln Pro Thr Arg Arg Gln Ile Arg Leu Ser Ser Pro Glu
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<210> 6193
<211> 2893
<212> DNA
<213> Homo sapiens
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<210> 6194

<211> 621

<212> PRT

<213> Homo sapiens

<400> 6194

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			20					25					30		
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Ala	Glu	Val	Val	Gln	Tyr	Ala	Lys	Glu	Val	Val	Asp	Phe	Ser	Ser	His
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Tyr	Gly	Ser	Glu	Asn	Ser	Met	Ser	Tyr	Thr	Met	Trp	Asn	Leu	Ala	Gly
65				70						75				80	
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			85					90					95		
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			100					105					110		
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		115					120					125			
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		130				135					140				
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5379

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<210> 6195

<211> 518

<212> DNA

<213> Homo sapiens

<400> 6195

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<210> 6196

<211> 117

<212> PRT

<213> Homo sapiens

<400> 6196

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 20 25 30
 Leu Leu Leu Ser Arg Thr Thr Arg Val Lys Pro His Pro Tyr Lys Tyr
 35 40 45
 Gln Val His Pro Asn Ser Ser Leu Ala Gln Lys Trp Cys Tyr Ile His
 50 55 60
 Trp Glu Gln Thr Cys Ile Pro Thr Pro Arg His Val Thr Thr Gly Thr
 65 70 75 80
 Ala Asn Glu Leu Cys Pro Gly Asn Ser Phe Thr Pro Ser Ser Cys Ser
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 His Arg Thr Gly Trp
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<210> 6197

<211> 2841

<212> DNA

<213> Homo sapiens

<400> 6197

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<210> 6198

<211> 124

<212> PRT

<213> Homo sapiens

<400> 6198

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	20	25	30
Ser Ser Gln His His Gly Leu Asn Thr His Trp Ala Pro Thr Leu Gly			
	35	40	45
Pro Gly Trp Gly Met Trp Gly Gln Glu Ala Ala Gln Ser Gly Arg Gln			
	50	55	60
Arg Glu Lys Cys Val Gln Arg Ala Pro Ile Ser Gly Cys Asn Val Val			
65	70	75	80
Leu Arg Leu Trp Leu Gly Ser Ala Ser Arg Val Ser Tyr Val Leu Cys			
	85	90	95
Ser Tyr Phe Leu Ser Pro Thr Leu Pro Cys Arg Asn Pro Ser Glu Tyr			
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<210> 6199

<211> 1777

<212> DNA

<213> Homo sapiens

<400> 6199

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<210> 6200

<211> 164

<212> PRT

<213> Homo sapiens

<400> 6200

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		20						25					30		
Pro	Pro	Lys	Pro	Asp	Cys	Gln	Gln	Lys	Pro	Ser	Pro	Ser	Glu	Gly	Gln
		35						40					45		
Val	Gly	Val	Pro	Xaa	Arg	Ser	Pro	His	Pro	Gln	Gly	Gly	Phe	Thr	His
	50					55					60				
Cys	Pro	Val	Pro	Gly	Met	Pro	Gly	Gly	Arg	Pro	Leu	Cys	Cys	Cys	His
65				70					75					80	
Cys	Cys	Gln	His	Cys	Pro	Ala	Cys	Glu	Ala	Arg	Arg	Ser	Pro	Cys	Pro
			85					90					95		
Thr	Arg	Cys	Cys	Cys	Ser	Ser	Asp	Pro	Cys	Cys	Glu	Glu	Trp	Asp	Ser
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Trp	Ser	Lys	Lys	Leu	Val	Phe	Leu	Phe	Cys	Ile	Asn	Glu	Lys	Asn	Pro
	115						120					125			
Gly	Glu	Ala	Ala	Thr	Leu	Pro	Ser	Gln	Arg	Asp	Ala	Leu	Pro	Cys	Phe
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160

<210> 6201

<211> 604

<212> DNA

<213> Homo sapiens

<400> 6201

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604

<210> 6202

<211> 124

<212> PRT

<213> Homo sapiens

<400> 6202

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35 40 45

Ala Gly Leu Arg Gly Cys Arg Glu Glu Phe Gly Gly Lys Gly Gln Pro
50 55 60

Gln Ser Leu Ser Cys Ala Ser Trp Glu Arg Gly Met Thr Gly Arg His
65 70 75 80

Thr Asn Val Ser Gln Gly Arg Trp Ala Trp Gly His Arg Ala Pro Arg
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Gly Gly Ser Gly Glu Gly Glu Pro Ala Glu Glu Arg Pro Gly Arg Ala
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Gly Asp His Ala Gly Ala Gln Gly Glu Arg Gln Asp

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<210> 6203

<211> 3462

<212> DNA

<213> Homo sapiens

<400> 6203

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<210> 6204

<211> 486

<212> PRT

<213> Homo sapiens

<400> 6204

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Asp	Gly	His	Arg	Leu	Cys	Ser	Asp	Leu	Met	Asn	Cys	Leu	His	Glu	Arg
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<211> 926

<212> DNA

<213> Homo sapiens

<400> 6205

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<211> 92

<212> PRT

<213> Homo sapiens

<400> 6206

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			20				25				30				
Arg	Glu	Gly	Lys	Glu	Phe	Ala	Asp	Ser	Gln	Lys	Leu	Leu	Phe	Met	Glu
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	50				55			60							
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<210> 6207

<211> 1384

<212> DNA

<213> Homo sapiens

<400> 6207

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<210> 6208

<211> 290

<212> PRT

<213> Homo sapiens

<400> 6208

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		35					40					45			
Ser	Ala	Ala	Ala	Thr	Val	Arg	Glu	Ala	Gln	Gly	Leu	Met	Ala	Gly	Gly
		50				55					60				
Phe	Leu	Cys	Phe	Ser	Leu	Ala	Phe	Xaa	Ala	Gln	Val	Gln	Val	Val	Phe
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Trp	Arg	Leu	His	Ser	Pro	Thr	Gln	Val	Glu	Asp	Ala	Met	Leu	Asp	Thr

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Lys Ser Pro Phe Ser Arg Leu Gly Ser Thr Glu Ala Asp Leu Cys Gln
      130          135          140
Gly Glu Glu Ala Ala Arg Glu Asp Cys Leu Gln Gly Ile Arg Ser Phe
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Leu Arg Thr His Gln Gln Val Ala Ser Ser Leu Thr Ser Ile Gly Leu
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Ala Leu Thr Val Ser Ala Leu Leu Phe Ser Ser Phe Leu Trp Phe Ala
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<210> 6209

<211> 2269

<212> DNA

<213> Homo sapiens

<400> 6209

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<211> 165

<212> PRT

<213> Homo sapiens

<400> 6210

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			20					25					30		
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Val	Val	Asp	Glu	Ala	Ile	Asp	Ser	Leu	Ala	Arg	Thr	Lys	Gly	Val	Met
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Lys	Pro	Pro	Cys	Ser	Glu	Gly	Ser	Pro	Trp	Arg	Cys	Pro	His	Phe	Thr
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Cys	Trp	Val	Leu	Gln	Ala	Arg	Lys	Pro	Gly	Ser	Gly	Gly	Thr	Arg	Glu
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<210> 6211

<211> 2163

<212> DNA

<213> Homo sapiens

<400> 6211

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 Gly Val Gln Asp Gln Leu Ile Glu Lys Arg Glu Pro Gly Ser Gly Thr
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 Glu Ser Asp Thr Ser Pro Asp Phe His Asn Gln Glu Asn Glu Pro Ser
 130 135 140
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<212> PRT

<213> Homo sapiens

<400> 6214

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<210> 6216
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 35 40 45
 Leu Gln Glu Ser Asp Ala Ala Pro Leu Pro Leu Ser Cys His Leu Ala
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<400> 6217

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<211> 133

<212> PRT

<213> Homo sapiens

<400> 6218

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<210> 6219

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<212> DNA

<213> Homo sapiens

<400> 6219

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 Gly Gly Pro Ala Pro Ser Pro Gln Xaa Tyr Ile His Asp Ser Pro Ser
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 Cys Trp Pro Trp Thr Lys Ala Gly Ser Ser Xaa Cys Pro Val Arg Ser
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 <212> DNA
 <213> Homo sapiens

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<210> 6222

<211> 330

<212> PRT

<213> Homo sapiens

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Gln	Val	Ile	His	Ser	Gly	Glu	Lys	Arg	His	Lys	Cys	Leu	Glu	Cys	Gly
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	290				295					300					
Val	Ile	Cys	Gly	Lys	Ser	Phe	Lys	Trp	His	Thr	Ser	Phe	Ile	Lys	His
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<210> 6223

<211> 944

<212> DNA

<213> Homo sapiens

<400> 6223

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<211> 156

<212> PRT

<213> Homo sapiens

<400> 6224

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		20						25					30		
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	35					40						45			
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Gln	Pro	Glu	Asn	Met	Gln	Pro	Arg	Thr	Arg	Arg	Thr	Lys	Phe	Thr	Leu
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		115						120				125			
Asp	Val	Pro	Thr	Arg	Arg	Glu	Leu	Ala	Glu	Asn	Leu	Gly	Val	Thr	Glu
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<210> 6225

<211> 3851

<212> DNA

<213> Homo sapiens

<400> 6225

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<212> PRT

<213> Homo sapiens

<400> 6226

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Gln	Gly	Asp	Phe	Ile	Lys	Cys	Val	Glu	Gln	Lys	Thr	Asp	Ala	Leu	Gly
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Lys	Gln	Ser	Val	Asn	Arg	Gly	Phe	Thr	Lys	Asp	Lys	Thr	Leu	Ser	Ser
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Gln	Ile	Trp	Gln	Gln	Tyr	Phe	Ala	Ala	Lys	Asp	Thr	Val	Tyr	Ala	Val
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Ile	Pro	Ala	Glu	Lys	Phe	Asp	Leu	Ile	Trp	Asn	Arg	Ala	Gln	Ser	Cys
		100					105					110			
Pro	Thr	Phe	Leu	Cys	Ala	Leu	Pro	Arg	Arg	Glu	Gly	Tyr	Glu	Phe	Phe
		115				120						125			
Val	Gly	Gln	Trp	Thr	Gly	Thr	Glu	Leu	His	Phe	Thr	Ala	Leu	Ile	Asn
	130					135					140				
Ile	Gln	Thr	Arg	Gly	Glu	Ala	Ala	Ala	Ser	Gln	Leu	Ile	Leu	Tyr	His
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Tyr	Pro	Glu	Leu	Lys	Glu	Gly	Lys	Gly	Ile	Val	Leu	Met	Thr	Ala	Glu
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Gln	Val	Gln	Leu	Phe	Tyr	Ala	Thr	Asp	Arg	Lys	Glu	Thr	Tyr	Gly	Leu
		195				200						205			
Val	Glu	Thr	Phe	Asn	Leu	Arg	Pro	Asn	Glu	Phe	Lys	Tyr	Met	Ser	Val
	210					215					220				
Ile	Ala	Glu	Leu	Glu	Gln	Ser	Gly	Leu	Gly	Ala	Glu	Leu	Lys	Cys	Ala
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 <212> DNA
 <213> Homo sapiens

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<210> 6228
 <211> 271
 <212> PRT
 <213> Homo sapiens

<400> 6228
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 20 25 30
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 35 40 45
 Ile Pro Ser Gly Thr Ile Leu Lys Ala Leu Met Glu Gly Gly Glu Asn
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 Gly Pro Trp Met Arg Phe Met Arg Ala Glu Ile Thr Ala Glu Gly Phe
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<212> DNA
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720

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<210> 6230

<211> 944

<212> PRT

<213> Homo sapiens

<400> 6230

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Asn	Ala	Glu	Val	Ala	Cys	Val	Ala	Val	His	Asp	Glu	Ser	Ala	Phe	Val
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65				70					75				80		
Gln	Ser	Asp	Phe	Leu	Arg	Phe	Cys	Arg	Gly	Pro	Pro	Trp	Lys	Asp	Pro
			85					90				95			
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			100				105					110			
Ser	Leu	Pro	Arg	Ser	Ser	Leu	Glu	His	Gly	Ser	Asp	Val	Tyr	Leu	Leu
			115				120				125				
Arg	Lys	Met	Val	Glu	Glu	Val	Phe	Asp	Val	Leu	Tyr	Ser	Glu	Ala	Leu
	130				135					140					
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5414

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Lys	Ile	Leu	Glu	Ala	Ser	Asn	Ser	Ile	Gln	Phe	Val	Ile	Lys	Arg	Pro
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Glu	Leu	Leu	Thr	Glu	Gly	Val	Lys	Glu	Pro	Ile	Val	Asp	Ser	Gln	Glu
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Arg	Asp	Ser	Gly	Asp	Pro	Leu	Val	Asp	Glu	Ser	Leu	Lys	Arg	Gln	Gly
			660					665				670			
Phe	Gln	Glu	Asn	Tyr	Asp	Ala	Arg	Leu	Ser	Arg	Ile	Asp	Ile	Ala	Asn
	675					680					685				
Thr	Leu	Arg	Glu	Gln	Val	Gln	Asp	Leu	Phe	Asn	Lys	Lys	Tyr	Gly	Glu
	690				695					700					
Ala	Leu	Gly	Ile	Lys	Tyr	Pro	Val	Gln	Val	Pro	Tyr	Lys	Arg	Ile	Lys
705				710						715					720
Ser	Asn	Pro	Gly	Ser	Val	Ile	Ile	Glu	Gly	Leu	Pro	Pro	Gly	Ile	Pro
			725					730					735		
Phe	Arg	Lys	Pro	Cys	Thr	Phe	Gly	Ser	Gln	Asn	Leu	Glu	Arg	Ile	Leu
			740				745					750			
Ala	Val	Ala	Asp	Lys	Ile	Lys	Phe	Thr	Val	Thr	Arg	Pro	Phe	Gln	Gly
	755					760				765					
Leu	Ile	Pro	Lys	Pro	Asp	Glu	Asp	Asp	Ala	Asn	Arg	Leu	Gly	Glu	Lys
	770				775					780					
Val	Ile	Leu	Arg	Glu	Gln	Val	Lys	Glu	Leu	Phe	Asn	Glu	Lys	Tyr	Gly
785				790						795					800
Glu	Ala	Leu	Gly	Leu	Asn	Arg	Pro	Val	Leu	Val	Pro	Tyr	Lys	Leu	Ile
			805					810						815	
Arg	Asp	Ser	Pro	Asp	Ala	Val	Glu	Val	Thr	Gly	Leu	Pro	Asp	Asp	Ile
			820				825					830			
Pro	Phe	Arg	Asn	Pro	Asn	Thr	Tyr	Asp	Ile	His	Arg	Leu	Glu	Lys	Ile
	835					840					845				
Leu	Lys	Ala	Arg	Glu	His	Val	Arg	Met	Val	Ile	Ile	Asn	Gln	Leu	Gln
	850				855					860					
Pro	Phe	Ala	Glu	Ile	Cys	Asn	Asp	Ala	Lys	Val	Pro	Ala	Lys	Asp	Ser
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Ser	Ile	Pro	Lys	Arg	Lys	Arg	Lys	Arg	Val	Ser	Glu	Gly	Asn	Ser	Val
			885					890					895		
Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Asn	Pro	Asp	Ser
			900				905					910			
Val	Ala	Ser	Ala	Asn	Gln	Ile	Ser	Leu	Val	Gln	Trp	Pro	Met	Tyr	Met
	915					920						925			
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<210> 6231

<211> 471

<212> DNA

<213> Homo sapiens

<400> 6231

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120

ttgccttttt aaaaaaaaaa aaaagggtca aaaaaagagt atgctgggcc aaaaatctgg
 180
 cccctcaggc ctcctgacct ggaggagaaa aagggggccg aagccccccg ttgcccccat
 240
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<210> 6232

<211> 138

<212> PRT

<213> Homo sapiens

<400> 6232

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Gly	Asp	Arg	Thr	Arg	Pro	Cys	Leu	Phe	Lys	Lys	Lys	Lys	Lys	Ala	Gln
			20					25					30		
Lys	Lys	Ser	Met	Leu	Gly	Gln	Lys	Ser	Gly	Pro	Ser	Gly	Leu	Leu	Thr
		35				40						45			
Trp	Arg	Arg	Lys	Arg	Gly	Pro	Lys	Pro	Pro	Val	Ala	Pro	Ile	Ser	Ile
	50				55					60					
Trp	Asn	Gly	Thr	Thr	Pro	Arg	Gly	Glu	Pro	Pro	Pro	Asn	His	Ser	Ser
65				70				75						80	
Lys	Lys	Gly	Thr	Lys	Lys	Trp	Ala	Leu	Asp	Phe	Ser	Thr	Pro	Glu	Thr
			85				90						95		
Gln	Phe	Pro	Pro	Pro	Gly	Arg	Pro	Phe	Leu	Gly	Ile	Pro	Thr	Trp	Asp
		100				105						110			
Pro	Thr	Trp	Ala	Tyr	Ser	Gly	Pro	Tyr	Leu	Phe	Leu	Val	Gly	Ile	Gly
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Ile	Pro	Phe	Pro	Phe	Pro	Pro	Pro	Ser	Asn						
	130					135									

<210> 6233

<211> 894

<212> DNA

<213> Homo sapiens

<400> 6233

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<210> 6234

<211> 230

<212> PRT

<213> Homo sapiens

<400> 6234

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Lys	Lys	Arg	Arg	Val	Gly	Asp	Leu	Leu	Ala	Ser	Tyr	Ile	Pro	Glu	Asp
			20					25					30		
Glu	Ala	Leu	Met	Leu	Arg	Asp	Gly	Arg	Phe	Ala	Cys	Ala	Ile	Cys	Pro
		35					40					45			
His	Arg	Pro	Val	Leu	Asp	Thr	Leu	Ala	Met	Leu	Thr	Ala	His	Arg	Ala
		50				55					60				
Gly	Lys	Lys	His	Leu	Ser	Ser	Leu	Gln	Leu	Phe	Tyr	Gly	Lys	Lys	Gln
65				70					75					80	
Pro	Gly	Lys	Glu	Arg	Lys	Gln	Asn	Pro	Lys	His	Gln	Asn	Glu	Leu	Arg
			85					90					95		
Arg	Glu	Glu	Thr	Lys	Ala	Glu	Ala	Pro	Leu	Leu	Thr	Gln	Thr	Arg	Leu
			100					105					110		
Ile	Thr	Gln	Ser	Ala	Leu	His	Arg	Ala	Pro	His	Tyr	Asn	Ser	Cys	Cys
		115					120					125			
Arg	Arg	Lys	Tyr	Arg	Pro	Glu	Ala	Pro	Gly	Pro	Ser	Val	Ser	Leu	Ser
		130				135					140				
Pro	Met	Pro	Pro	Ser	Glu	Val	Lys	Leu	Gln	Ser	Gly	Lys	Ile	Ser	Arg
145				150					155					160	
Glu	Pro	Glu	Pro	Ala	Ala	Gly	Pro	Gln	Ala	Glu	Glu	Ser	Ala	Thr	Val
			165					170						175	
Ser	Ala	Pro	Ala	Pro	Met	Ser	Pro	Thr	Arg	Arg	Arg	Ala	Leu	Asp	His
		180						185					190		
Tyr	Leu	Thr	Leu	Arg	Ser	Ser	Gly	Trp	Ile	Pro	Asp	Gly	Arg	Gly	Arg
		195					200				205				
Trp	Val	Lys	Asp	Glu	Asn	Val	Glu	Phe	Asp	Ser	Asp	Glu	Glu	Glu	Pro

210 215 220
Pro Asp Leu Pro Leu Asp
225 230

<210> 6235
<211> 3427
<212> DNA
<213> Homo sapiens

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<210> 6236

<211> 820

<212> PRT

<213> Homo sapiens

<400> 6236

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			20					25					30		
Pro	Glu	Gly	Gly	Leu	Pro	Gly	Pro	Trp	Ala	Leu	His	Arg	Gly	Arg	Lys
			35				40					45			
Lys	Ala	Thr	Gly	Ser	Pro	Val	Ser	Ile	Phe	Val	Tyr	Asp	Val	Lys	Pro
	50					55					60				
Gly	Ala	Glu	Glu	Gln	Thr	Gln	Val	Ala	Lys	Ala	Ala	Phe	Lys	Arg	Phe
65					70					75				80	
Lys	Thr	Leu	Arg	His	Pro	Asn	Ile	Leu	Ala	Tyr	Ile	Asp	Gly	Leu	Glu
				85					90					95	
Thr	Glu	Lys	Cys	Leu	His	Val	Val	Thr	Glu	Ala	Val	Thr	Pro	Leu	Gly
				100				105					110		
Ile	Tyr	Leu	Lys	Ala	Arg	Val	Glu	Ala	Gly	Gly	Leu	Lys	Glu	Leu	Glu
				115				120				125			
Ile	Ser	Trp	Gly	Leu	His	Gln	Ile	Val	Lys	Ala	Leu	Ser	Phe	Leu	Val
	130					135					140				
Asn	Asp	Cys	Ser	Leu	Ile	His	Asn	Asn	Val	Cys	Met	Ala	Ala	Val	Phe
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Val	Asp	Arg	Ala	Gly	Glu	Trp	Lys	Leu	Gly	Gly	Leu	Asp	Tyr	Met	Tyr
				165					170					175	
Ser	Ala	Gln	Gly	Asn	Gly	Gly	Gly	Pro	Pro	Arg	Lys	Gly	Ile	Pro	Glu
				180				185					190		
Leu	Glu	Gln	Tyr	Asp	Pro	Pro	Glu	Leu	Ala	Asp	Ser	Ser	Gly	Arg	Val
				195				200				205			
Val	Arg	Glu	Lys	Trp	Ser	Ala	Asp	Met	Trp	Arg	Leu	Gly	Cys	Leu	Ile
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          260          265          270
Cys Arg Ala Pro Gly Gly Phe Met Ser Asn Arg Phe Val Glu Thr Asn
          275          280          285
Leu Phe Leu Glu Glu Ile Gln Ile Lys Glu Pro Ala Glu Lys Gln Lys
          290          295          300
Phe Phe Gln Glu Leu Ser Lys Ser Leu Asp Ala Phe Pro Glu Asp Phe
305          310          315          320
Cys Arg His Lys Val Leu Pro Gln Leu Leu Thr Ala Phe Glu Phe Gly
          325          330          335
Asn Ala Gly Ala Val Val Leu Thr Pro Leu Phe Lys Val Gly Lys Phe
          340          345          350
Leu Ser Ala Glu Glu Tyr Gln Gln Lys Ile Ile Pro Val Val Val Lys
          355          360          365
Met Phe Ser Ser Thr Asp Arg Ala Met Arg Ile Arg Leu Leu Gln Gln
          370          375          380
Met Glu Gln Phe Ile Gln Tyr Leu Asp Glu Pro Thr Val Asn Thr Gln
385          390          395          400
Ile Phe Pro His Val Val His Gly Phe Leu Asp Thr Asn Pro Ala Ile
          405          410          415
Arg Glu Gln Thr Val Lys Ser Met Leu Leu Leu Ala Pro Lys Leu Asn
          420          425          430
Glu Ala Asn Leu Asn Val Glu Leu Met Lys His Phe Ala Arg Leu Gln
          435          440          445
Ala Lys Asp Glu Gln Gly Pro Ile Arg Cys Asn Thr Thr Val Cys Leu
          450          455          460
Gly Lys Ile Gly Ser Tyr Leu Ser Ala Ser Thr Arg His Arg Val Leu
465          470          475          480
Thr Ser Ala Phe Ser Arg Ala Thr Arg Asp Pro Phe Ala Pro Ser Arg
          485          490          495
Val Ala Gly Val Leu Gly Phe Ala Ala Thr His Asn Leu Tyr Ser Met
          500          505          510
Asn Asp Cys Ala Gln Lys Ile Leu Pro Val Leu Cys Gly Leu Thr Val
          515          520          525
Asp Pro Glu Lys Ser Val Arg Asp Gln Ala Phe Lys Ala Ile Arg Ser
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Phe Leu Ser Lys Leu Glu Ser Val Ser Glu Asp Pro Thr Gln Leu Glu
545          550          555          560
Glu Val Glu Lys Asp Val His Ala Ala Ser Ser Pro Gly Met Gly Gly
          565          570          575
Ala Ala Ala Ser Trp Ala Gly Trp Ala Val Thr Gly Val Ser Ser Leu
          580          585          590
Thr Ser Lys Leu Ile Arg Ser His Pro Thr Thr Ala Pro Thr Glu Thr
          595          600          605
Asn Ile Pro Gln Arg Pro Thr Pro Glu Gly Val Pro Ala Pro Ala Pro
610          615          620
Thr Pro Val Pro Ala Thr Pro Thr Thr Ser Gly His Trp Glu Thr Gln
625          630          635          640
Glu Glu Asp Lys Asp Thr Ala Glu Asp Ser Ser Thr Ala Asp Arg Trp
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Asp Asp Glu Asp Trp Gly Ser Leu Glu Gln Glu Ala Glu Ser Val Leu

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675										680					685				
Gln	Val	Ser	Asn	Ser	Asp	His	Lys	Ser	Ser	Lys	Ser	Pro	Glu	Ser	Asp				
690										695					700				
Trp	Ser	Ser	Trp	Glu	Ala	Glu	Gly	Ser	Trp	Glu	Gln	Gly	Trp	Gln	Glu				
705										710					715				
Pro	Ser	Ser	Gln	Glu	Pro	Pro	Pro	Asp	Gly	Thr	Arg	Leu	Ala	Ser	Glu				
725										730					735				
Tyr	Asn	Trp	Gly	Gly	Pro	Glu	Ser	Ser	Asp	Lys	Gly	Asp	Pro	Phe	Ala				
740										745					750				
Thr	Leu	Ser	Ala	Arg	Pro	Ser	Thr	Gln	Pro	Arg	Pro	Asp	Ser	Trp	Gly				
755										760					765				
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770										775					780				
Glu	Leu	Ala	Arg	Lys	Lys	Arg	Glu	Glu	Arg	Arg	Arg	Glu	Met	Glu	Ala				
785										790					795				
Lys	Arg	Ala	Glu	Arg	Lys	Val	Ala	Lys	Gly	Pro	Met	Lys	Leu	Gly	Ala				
805										810					815				
Arg	Lys	Leu	Asp																
820																			

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	20	25	30
Ser Thr Pro Lys Asn Gly Met Ser Ser Lys Ser Arg Lys Arg Ile Met			
	35	40	45
Pro Asp Pro Val Thr Glu Pro Pro Val Thr Asp Pro Val Tyr Glu Ala			
	50	55	60
Leu Leu Tyr Cys Asn Ile Pro Ser Val Ala Glu Arg Ser Met Glu Gly			
65	70	75	80
His Ala Pro His His Phe Lys Leu Val Ser Val His Val Phe Ile Arg			
	85	90	95
His Gly Asp Arg Tyr Pro Leu Tyr Val Ile Pro Lys Thr Lys Arg Pro			
	100	105	110
Glu Ile Asp Cys Thr Leu Val Ala Asn Arg Lys Pro Tyr His Pro Lys			
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<210> 6239

<211> 911

<212> DNA

<213> Homo sapiens

<400> 6239

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<212> PRT

<213> Homo sapiens

<400> 6242

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Gln Gly Leu Val Lys His Thr Gly Gly Cys His Cys Gly Ala Val Arg
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Phe Glu Val Trp Ala Ser Ala Asp Leu His Ile Phe Asp Cys Asn Cys
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<212> DNA

<213> Homo sapiens

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<212> PRT

<213> Homo sapiens

<400> 6244

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<212> DNA

<213> Homo sapiens

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<211> 1286

<212> PRT

<213> Homo sapiens

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 Val Pro Leu Gln Tyr Asn Glu Leu Lys Leu Ala Leu Glu Lys Glu Lys
 515 520 525
 Ala Arg Cys Ala Glu Leu Glu Glu Ala Leu Gln Lys Thr Arg Ile Glu
 530 535 540
 Leu Arg Ser Ala Arg Glu Glu Ala Ala His Arg Lys Ala Thr Asp His
 545 550 555 560
 Pro His Pro Ser Thr Pro Ala Thr Ala Arg Gln Gln Ile Ala Met Ser
 565 570 575
 Ala Ile Val Arg Ser Pro Glu His Gln Pro Ser Ala Met Ser Leu Leu

5433

1010	1015	1020
Asp Lys Asn Asp His Ser Leu Ala Pro Ala Val Phe Ala Ala Ser Ser		
1025	1030	1035
Asn Ser Phe Pro Val Ser Ile Val Gln Val Asn Ser Ala Gly Gln Arg		1040
	1045	1050
Glu Glu Tyr Leu Leu Cys Phe His Glu Phe Gly Val Phe Val Asp Ser		1055
	1060	1065
Tyr Gly Arg Arg Ser Arg Thr Asp Asp Leu Lys Trp Ser Arg Leu Pro		1070
	1075	1080
Leu Ala Phe Ala Tyr Arg Glu Pro Tyr Leu Phe Val Thr His Phe Asn		1085
	1090	1095
Ser Leu Glu Val Ile Glu Ile Gln Ala Arg Ser Ser Ala Gly Thr Pro		1100
1105	1110	1115
Ala Arg Ala Tyr Leu Asp Ile Pro Asn Pro Arg Tyr Leu Gly Pro Ala		1120
	1125	1130
Ile Ser Ser Gly Ala Ile Tyr Leu Ala Ser Ser Tyr Gln Asp Lys Leu		1135
	1140	1145
Arg Val Ile Cys Cys Lys Gly Asn Leu Val Lys Glu Ser Gly Thr Glu		1150
	1155	1160
His His Arg Gly Pro Ser Thr Ser Arg Ser Ser Pro Asn Lys Arg Gly		1165
	1170	1175
Pro Pro Thr Tyr Asn Glu His Ile Thr Lys Arg Val Ala Ser Ser Pro		1180
1185	1190	1195
Ala Pro Pro Glu Gly Pro Ser His Pro Arg Glu Pro Ser Thr Pro His		1200
	1205	1210
Arg Tyr Arg Glu Gly Arg Thr Glu Leu Arg Arg Asp Lys Ser Pro Gly		1215
	1220	1225
Arg Pro Leu Glu Arg Glu Lys Ser Pro Gly Arg Met Leu Ser Thr Arg		1230
	1235	1240
Arg Glu Arg Ser Pro Gly Arg Leu Phe Glu Asp Ser Ser Arg Gly Arg		1245
	1250	1255
Leu Pro Ala Gly Ala Val Arg Thr Pro Leu Ser Gln Val Asn Lys Val		1260
1265	1270	1275
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<210> 6247

<211> 497

<212> DNA

<213> Homo sapiens

<400> 6247

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120

aaggctgcat ggggggtcctt gcccgaggagg cgccccacct agagaaacag ccggcagccg
180

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240

caacccatgt ctatcgttat cacagaggcg agtcgaagct gcacatgtgc ttggacatag
300

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360

tatcagagca tgctccagag gcacccagc ctgtgagtac ggaactgctt acgcactggg
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<210> 6248

<211> 142

<212> PRT

<213> Homo sapiens

<400> 6248

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		20						25					30		
Ala	Ser	Gln	Arg	Leu	His	Gly	Gly	Pro	Cys	Pro	Gly	Gly	Ala	Pro	Pro
		35					40					45			
Arg	Glu	Thr	Ala	Gly	Ser	Arg	Pro	Ala	Ala	Arg	Ser	Pro	Gly	Arg	Glu
	50				55					60					
Ile	Leu	Phe	Ile	Cys	Ala	Arg	Gly	Arg	Arg	Gly	Asn	Pro	Cys	Leu	Ser
65				70					75					80	
Leu	Ser	Gln	Arg	Arg	Val	Glu	Ala	Ala	His	Val	Leu	Gly	His	Arg	Glu
		85						90					95		
Trp	Ser	Glu	Lys	Arg	Gln	Lys	Lys	Asp	Ile	Pro	Trp	Ser	Trp	Arg	Gln
		100					105					110			
Leu	Ser	Asn	Ile	Arg	Ala	Cys	Ser	Arg	Gly	Ile	Pro	Ala	Cys	Glu	Tyr
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Gly	Thr	Ala	Tyr	Ala	Leu	Gly	Phe	Thr	Thr	Val	Ala	Thr	Pro		
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<210> 6249

<211> 1217

<212> DNA

<213> Homo sapiens

<400> 6249

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 180
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 attaatgagt ccaaacttca ggaactggaa aagtaccgg gtattcaaac tcgtgtcctt
 360
 gatgtcacao agaagaaaca aattgatcag tttgccaatg aagttgagag acttgatgtt
 420
 ctctttaatg ttgctgggtt tgtccatcat ggaactgtcc tggattgtga ggagaaagac
 480

tgggacttct cgatgaatct caatgtgcgc agcatgtacc tgatgatcaa ggcattcctt
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 600
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 720
 ggaacagttg atacgccatc tctacaagaa agaatacaag ccagaggaaa tcctgaagag
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 1020
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 1080
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<210> 6250

<211> 245

<212> PRT

<213> Homo sapiens

<400> 6250

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		20					25					30			
Val	Ile	Ala	Thr	Asp	Ile	Asn	Glu	Ser	Lys	Leu	Gln	Glu	Leu	Glu	Lys
	35					40					45				
Tyr	Pro	Gly	Ile	Gln	Thr	Arg	Val	Leu	Asp	Val	Thr	Lys	Lys	Lys	Gln
	50					55					60				
Ile	Asp	Gln	Phe	Ala	Asn	Glu	Val	Glu	Arg	Leu	Asp	Val	Leu	Phe	Asn
65				70					75				80		
Val	Ala	Gly	Phe	Val	His	His	Gly	Thr	Val	Leu	Asp	Cys	Glu	Glu	Lys
		85					90						95		
Asp	Trp	Asp	Phe	Ser	Met	Asn	Leu	Asn	Val	Arg	Ser	Met	Tyr	Leu	Met
	100						105						110		
Ile	Lys	Ala	Phe	Leu	Pro	Lys	Met	Leu	Ala	Gln	Lys	Ser	Gly	Asn	Ile
	115					120					125				
Ile	Asn	Met	Ser	Ser	Val	Ala	Ser	Ser	Val	Lys	Gly	Val	Val	Asn	Arg
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Cys	Val	Tyr	Ser	Thr	Thr	Lys	Ala	Ala	Val	Ile	Gly	Leu	Thr	Lys	Ser
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<400> 6251
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480
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600
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720
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960
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1080

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<211> 100

<212> PRT

<213> Homo sapiens

<400> 6252

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Ala	Lys	Ser	Ser	Lys	Gly	Lys	Gly	Arg	Gly	His	Ser	Gly	Glu	Asn	Ser
			20					25					30		
Ile	Ser	Gly	Lys	Thr	Gly	Ile	His	Phe	Lys	Ile	Ser	Ala	Gln	Lys	Gly
		35					40					45			
Ser	Arg	Ala	Val	Leu	Lys	Pro	Gly	Arg	Gln	Gly	Pro	Pro	Ile	Pro	Thr
		50				55					60				
Ile	Leu	Leu	Ser	Pro	Ser	Pro	Pro	Trp	Arg	Thr	Leu	Ala	Arg	Val	Tyr
65				70				75					80		
Arg	Glu	Ser	His	His	Ile	Tyr	Tyr	Glu	Ala	Arg	Ala	Leu	Gly	Tyr	Val
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<210> 6253

<211> 1953

<212> DNA

<213> Homo sapiens

<400> 6253

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 240

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480
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1260
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1320
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 1920
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaa
 1953

<210> 6254
 <211> 216
 <212> PRT
 <213> Homo sapiens

<400> 6254
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 Glu Ala Thr Leu Gly Ser Gly Asn Leu Arg Gln Ala Val Met Leu Pro
 35 40 45
 Glu Gly Glu Asp Leu Asn Glu Trp Ile Ala Val Asn Thr Val Asp Phe
 50 55 60
 Phe Asn Gln Ile Asn Met Leu Tyr Gly Thr Ile Thr Glu Phe Cys Thr
 65 70 75 80
 Glu Ala Ser Cys Pro Val Met Ser Ala Gly Pro Arg Tyr Glu Tyr His
 85 90 95
 Trp Ala Asp Gly Thr Asn Ile Lys Lys Pro Ile Lys Cys Ser Ala Pro
 100 105 110
 Lys Tyr Ile Asp Tyr Leu Met Thr Trp Val Gln Asp Gln Leu Asp Asp
 115 120 125
 Glu Thr Leu Phe Pro Ser Lys Ile Gly Val Pro Phe Pro Lys Asn Phe
 130 135 140
 Met Ser Val Ala Lys Thr Ile Leu Lys Arg Leu Phe Arg Val Tyr Ala
 145 150 155 160
 His Ile Tyr His Gln His Phe Asp Ser Val Met Gln Leu Gln Glu Glu
 165 170 175
 Ala His Leu Asn Thr Ser Phe Lys His Phe Ile Phe Phe Val Gln Glu
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 195 200 205
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<210> 6255
 <211> 622
 <212> DNA
 <213> Homo sapiens

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<210> 6256
 <211> 150
 <212> PRT
 <213> Homo sapiens

<400> 6256
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 His Pro Arg Val Val Glu Leu Pro Lys Thr Asp Glu Gly Leu Gly Phe
 35 40 45
 Asn Ile Met Gly Gly Lys Glu Gln Asn Ser Pro Ile Tyr Ile Ser Arg
 50 55 60
 Val Ile Pro Gly Gly Val Ala Asp Arg His Gly Gly Leu Lys Arg Gly
 65 70 75 80
 Asp Gln Leu Leu Ser Val Asn Gly Val Ser Val Glu Gly Glu Gln His
 85 90 95
 Glu Lys Ala Val Glu Leu Leu Lys Ala Ala Gln Gly Ser Val Lys Leu
 100 105 110
 Val Val Arg Tyr Thr Pro Arg Val Leu Glu Glu Met Glu Ala Arg Phe
 115 120 125
 Glu Lys Met Arg Ser Ala Arg Arg Gln Gln His Gln Ser Tyr Ser
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<210> 6257
 <211> 2216
 <212> DNA
 <213> Homo sapiens

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<210> 6258

<211> 340

<212> PRT

<213> Homo sapiens

<400> 6258

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			20					25					30		
Ser	Pro	Cys	Gly	Lys	Phe	Leu	Ala	Ala	Gly	Asn	Asn	Tyr	Gly	Gln	Ile
		35					40					45			
Ala	Ile	Phe	Ser	Leu	Ser	Ser	Ala	Leu	Ser	Ser	Glu	Ala	Lys	Glu	Glu
	50					55					60				
Ser	Lys	Lys	Pro	Val	Val	Thr	Phe	Gln	Ala	His	Asp	Gly	Pro	Val	Tyr
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Ser	Met	Val	Ser	Thr	Asp	Arg	His	Leu	Leu	Ser	Ala	Gly	Asp	Gly	Glu
			85					90					95		
Val	Lys	Ala	Trp	Leu	Trp	Ala	Glu	Met	Leu	Lys	Lys	Gly	Cys	Lys	Glu
		100					105						110		
Leu	Trp	Arg	Arg	Gln	Pro	Pro	Tyr	Arg	Thr	Ser	Leu	Glu	Val	Pro	Glu
		115					120					125			
Ile	Asn	Ala	Leu	Leu	Leu	Val	Pro	Lys	Glu	Asn	Ser	Leu	Ile	Leu	Ala
	130					135					140				
Gly	Gly	Asp	Cys	Gln	Leu	His	Thr	Met	Asp	Leu	Glu	Thr	Gly	Thr	Phe
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Thr	Arg	Val	Leu	Arg	Gly	His	Thr	Asp	Tyr	Ile	His	Cys	Leu	Ala	Leu
			165					170					175		
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		180					185						190		
Arg	Leu	Trp	Asp	Leu	Arg	Thr	Ala	Lys	Glu	Val	Gln	Thr	Ile	Glu	Ser
	195						200					205			
Ile	Ser	Thr	Arg	Ser	Ala	Arg	Gly	Pro	Thr	Met	Gly	Ala	Gly	Leu	Asp
	210					215					220				
Val	Trp	Thr	Asp	Ser	Asp	Trp	Met	Val	Cys	Gly	Gly	Gly	Pro	Ala	Leu
225				230					235					240	
Thr	Leu	Trp	His	Leu	Arg	Ser	Ser	Thr	Pro	Thr	Thr	Ile	Phe	Pro	Ile
			245					250					255		
Arg	Ala	Pro	Gln	Lys	His	Val	Thr	Phe	Tyr	Gln	Asp	Leu	Ile	Leu	Ser

260 265 270
 Ala Gly Gln Gly Arg Cys Val Asn Gln Trp Gln Leu Ser Gly Glu Leu
 275 280 285
 Lys Ala Gln Val Pro Gly Ser Ser Pro Gly Leu Leu Ser Leu Ser Leu
 290 295 300
 Asn Gln Gln Pro Ala Ala Pro Glu Cys Lys Val Leu Thr Ala Ala Gly
 305 310 315 320
 Asn Ser Cys Arg Val Asp Val Phe Thr Asn Leu Gly Tyr Arg Ala Phe
 325 330 335
 Ser Leu Ser Phe
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<210> 6259
 <211> 384
 <212> DNA
 <213> Homo sapiens

<400> 6259
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 120
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 180
 tcacatacag accacttaat gggttgtact aagagtgcag agcctggaac cgagacgtct
 240
 cagggttaatt ccttctctga tctgaaggca tctactcttg ttcacaaaacc ccagtcagat
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<210> 6260
 <211> 128
 <212> PRT
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<400> 6260
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 20 25 30
 Gln Lys Asn Glu Lys Ile Lys Tyr Ser Arg Phe Ala Ala Thr Asn Thr
 35 40 45
 Arg Val Lys Ala Lys Gln Lys Pro Leu Ile Ser Asn Ser His Thr Asp
 50 55 60
 His Leu Met Gly Cys Thr Lys Ser Ala Glu Pro Gly Thr Glu Thr Ser
 65 70 75 80
 Gln Val Asn Ser Phe Ser Asp Leu Lys Ala Ser Thr Leu Val His Lys
 85 90 95
 Pro Gln Ser Asp Phe Thr Asn Asp Ala Leu Ser Pro Lys Phe Asn Leu
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115

120

125

<210> 6261

<211> 3619

<212> DNA

<213> Homo sapiens

<400> 6261

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120

ggtcggggcc attttccggg ccggggcgac taagggtgcg gggcccgggg ccagtatat
180

gaccggcgt cctgctatcc ttcgcttccc ccgccccatg tggctgcggg gccgcggcg
240

cgctgcccac tatggcccg aaagtagtta gcaggaagcg gaaagcgccc gcctcgccg
300

gagctgggag cgacgctcat gggcccgag tttggctggg atcactcgct tcacaaaagg
360

aaaagacttc ctctgtgaa gagatcctta gtatactact tgaagaaccg ggaagtcagg
420

ctacagaatg aaaccagcta ctctcgagtg ttgcatggtt atgcagcaca gcaacttccc
480

agtctcctga aggagagaga gtttcacctt gggaccctta ataaagtgtt tgcattctag
540

tggttgaatc ataggcaagt ggtgtgtggc acaaaatgca acacgctatt tgcgtagat
600

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660

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720

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780

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960

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1020

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1080

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1140

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1200

gctcatgtct cttcttggga tccacggcag ccatcataca acgtcaagtc tgtctgttcc
1260

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1320

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1380

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3000

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<211> 431

<212> PRT

<213> Homo sapiens

<400> 6262

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			20					25					30		
Val	Arg	Leu	Gln	Asn	Glu	Thr	Ser	Tyr	Ser	Arg	Val	Leu	His	Gly	Tyr
			35				40					45			
Ala	Ala	Gln	Gln	Leu	Pro	Ser	Leu	Leu	Lys	Glu	Arg	Glu	Phe	His	Leu
			50			55				60					
Gly	Thr	Leu	Asn	Lys	Val	Phe	Ala	Ser	Gln	Trp	Leu	Asn	His	Arg	Gln
65				70					75					80	
Val	Val	Cys	Gly	Thr	Lys	Cys	Asn	Thr	Leu	Phe	Val	Val	Asp	Val	Gln
			85					90					95		
Thr	Ser	Gln	Ile	Thr	Lys	Ile	Pro	Ile	Leu	Lys	Asp	Arg	Glu	Pro	Gly
			100					105					110		
Gly	Val	Thr	Gln	Gln	Gly	Cys	Gly	Ile	His	Ala	Ile	Glu	Leu	Asn	Pro
			115				120					125			
Ser	Arg	Thr	Leu	Leu	Ala	Thr	Gly	Gly	Asp	Asn	Pro	Asn	Ser	Leu	Ala
			130			135					140				
Ile	Tyr	Arg	Leu	Pro	Thr	Leu	Asp	Pro	Val	Cys	Val	Gly	Asp	Asp	Gly
145				150					155					160	
His	Lys	Asp	Trp	Ile	Phe	Ser	Ile	Ala	Trp	Ile	Ser	Asp	Thr	Met	Ala
			165					170					175		
Val	Ser	Gly	Ser	Arg	Asp	Gly	Ser	Met	Gly	Leu	Trp	Glu	Val	Thr	Asp
			180					185				190			
Asp	Val	Leu	Thr	Lys	Ser	Asp	Ala	Arg	His	Asn	Val	Ser	Arg	Val	Pro

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Val Tyr Ala His Ile Thr	His Lys Ala Leu Lys Asp	Ile Pro Lys Glu
210	215	220
Asp Thr Asn Pro Asp Asn Cys	Lys Val Arg Ala Leu Ala Phe Asn Asn	
225	230	235
Lys Asn Lys Glu Leu Gly Ala Val Ser	Leu Asp Gly Tyr Phe His Leu	
245	250	255
Trp Lys Ala Glu Asn Thr Leu Ser Lys	Leu Leu Ser Thr Lys Leu Pro	
260	265	270
Tyr Cys Arg Glu Asn Val Cys Leu Ala Tyr	Gly Ser Glu Trp Ser Val	
275	280	285
Tyr Ala Val Gly Ser Gln Ala His Val Ser	Phe Leu Asp Pro Arg Gln	
290	295	300
Pro Ser Tyr Asn Val Lys Ser Val Cys Ser	Arg Glu Arg Gly Ser Gly	
305	310	315
Ile Arg Ser Val Ser Phe Tyr Glu His Ile	Ile Thr Val Gly Thr Gly	
325	330	335
Gln Gly Ser Leu Leu Phe Tyr Asp Ile Arg	Ala Gln Arg Phe Leu Glu	
340	345	350
Glu Arg Leu Ser Ala Cys Tyr Gly Ser Lys	Pro Arg Leu Ala Gly Glu	
355	360	365
Asn Leu Lys Leu Thr Thr Gly Lys Gly Trp	Leu Asn His Asp Glu Thr	
370	375	380
Trp Arg Asn Tyr Phe Ser Asp Ile Asp Phe	Phe Pro Asn Ala Val Tyr	
385	390	395
Thr His Cys Tyr Asp Ser Ser Gly Thr Lys	Leu Phe Val Ala Gly Gly	
405	410	415
Pro Leu Pro Ser Gly Leu His Gly Asn Tyr	Ala Gly Leu Trp Ser	
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<210> 6263

<211> 2508

<212> DNA

<213> Homo sapiens

<400> 6263

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180

ctggcccgcg gaccgcgccg ccggctcgcc cgccagcccc tcggcgcccg gcggcgccg
240

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300

ccggagccgc ggaactcggc ggccgccatg gcgtccaaca tggaccggga gatgatcctg
360

gcggattttc aggcacgtac tggcattgaa aacattgacg aagctattac attgcttgaa
420

caaaataatt gggacttagt ggcagctatc aatgggtgaa taccacagga aaatggcatt
480

ctacaaagtg aatatggagg tgagaccata ccaggacctg catttaatcc agcaagtcac
540

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<210> 6264

<211> 654

<212> PRT

<213> Homo sapiens

<400> 6264

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Asn	Asn	Trp	Asp	Leu	Val	Ala	Ala	Ile	Asn	Gly	Val	Ile	Pro	Gln	Glu	35	40	45	
Asn	Gly	Ile	Leu	Gln	Ser	Glu	Tyr	Gly	Gly	Glu	Thr	Ile	Pro	Gly	Pro	50	55	60	
Ala	Phe	Asn	Pro	Ala	Ser	His	Pro	Ala	Ser	Ala	Pro	Thr	Ser	Ser	Ser	65	70	75	80
Ser	Ser	Ala	Phe	Arg	Pro	Val	Met	Pro	Ser	Arg	Gln	Ile	Val	Glu	Arg	85	90	95	
Gln	Pro	Arg	Met	Leu	Asp	Phe	Arg	Val	Glu	Tyr	Arg	Asp	Arg	Asn	Val	100	105	110	
Asp	Val	Val	Leu	Glu	Asp	Thr	Cys	Thr	Val	Gly	Glu	Ile	Lys	Gln	Ile	115	120	125	
Leu	Glu	Asn	Glu	Leu	Gln	Ile	Pro	Val	Ser	Lys	Met	Leu	Leu	Lys	Gly	130	135	140	
Trp	Lys	Thr	Gly	Asp	Val	Glu	Asp	Ser	Thr	Val	Leu	Lys	Ser	Leu	His	145	150	155	160
Leu	Pro	Lys	Asn	Asn	Ser	Leu	Tyr	Val	Leu	Thr	Pro	Asp	Leu	Pro	Pro	165	170	175	
Pro	Ser	Ser	Ser	Ser	His	Ala	Gly	Ala	Leu	Gln	Glu	Ser	Leu	Asn	Gln	180	185	190	
Asn	Phe	Met	Leu	Ile	Ile	Thr	His	Arg	Glu	Val	Gln	Arg	Glu	Tyr	Asn	195	200	205	
Leu	Asn	Phe	Ser	Gly	Ser	Ser	Thr	Ile	Gln	Glu	Val	Lys	Arg	Asn	Val	210	215	220	
Tyr	Asp	Leu	Thr	Ser	Ile	Pro	Val	Arg	His	Gln	Leu	Trp	Glu	Gly	Trp	225	230	235	240
Pro	Thr	Ser	Ala	Thr	Asp	Asp	Ser	Met	Cys	Leu	Ala	Glu	Ser	Gly	Leu	245	250	255	
Ser	Tyr	Pro	Cys	His	Arg	Leu	Thr	Val	Gly	Arg	Arg	Ser	Ser	Pro	Ala	260	265	270	
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Pro Met Ile Cys Phe Leu Val Pro Glu Asn Ala Glu Asn Glu Gly Asp		
325	330	335
Ala Leu Leu Gln Phe Thr Ala Glu Phe Ser Ser Arg Tyr Gly Asp Cys		
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355	360	365
Phe Tyr Val Lys Ala Arg Asp Arg Lys Leu Leu Ala Ile Tyr Leu His		
370	375	380
His Asp Glu Ser Val Leu Thr Asn Val Phe Cys Ser Gln Met Leu Cys		
385	390	395
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405	410	415
Trp Asp Leu Thr Lys Asp Ser Asn Arg Ala Arg Phe Leu Thr Met Cys		
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435	440	445
Thr Asp Gln Phe Pro Leu Phe Leu Ile Ile Met Gly Lys Arg Ser Ser		
450	455	460
Asn Glu Val Leu Asn Val Ile Gln Gly Asn Thr Thr Val Asp Glu Leu		
465	470	475
Met Met Arg Leu Met Ala Ala Met Glu Ile Phe Thr Ala Gln Gln Gln		
485	490	495
Glu Asp Ile Lys Asp Glu Asp Glu Arg Glu Ala Arg Glu Asn Val Lys		
500	505	510
Arg Glu Gln Asp Glu Ala Tyr Arg Leu Ser Leu Glu Ala Asp Arg Ala		
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530	535	540
Gln Ile Arg Lys Glu Gln Glu Glu Glu Arg Glu Ala Ile Arg Leu Ser		
545	550	555
Leu Glu Gln Ala Leu Pro Pro Glu Pro Lys Glu Glu Asn Ala Glu Pro		
565	570	575
Val Ser Lys Leu Arg Ile Arg Thr Pro Ser Gly Glu Phe Leu Glu Arg		
580	585	590
Arg Phe Leu Ala Ser Asn Lys Leu Gln Ile Val Phe Asp Phe Val Ala		
595	600	605
Ser Lys Gly Phe Pro Trp Asp Glu Tyr Lys Leu Leu Ser Thr Phe Pro		
610	615	620
Arg Arg Asp Val Thr Gln Leu Asp Pro Asn Lys Ser Leu Leu Glu Val		
625	630	635
Lys Leu Phe Pro Gln Glu Thr Leu Phe Leu Glu Ala Lys Glu		
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<211> 1344

<212> DNA

<213> Homo sapiens

<400> 6265

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<210> 6266

<211> 240

<212> PRT

<213> Homo sapiens

<400> 6266

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      20           25           30
Ser Pro Asp Asp Lys Glu Phe Gln Ser Val Glu Glu Glu Met Gln Ser
      35           40           45
Thr Val Arg Glu His Arg Asp Gly Gly His Ala Gly Gly Ile Phe Asn
      50           55           60
Arg Tyr Asn Ile Leu Lys Ile Gln Lys Val Cys Asn Lys Lys Leu Trp
      65           70           75           80
Glu Arg Tyr Thr His Arg Arg Lys Glu Val Ser Glu Glu Asn His Asn
      85           90           95
His Ala Asn Glu Arg Met Leu Phe His Gly Ser Pro Phe Val Asn Ala
      100          105          110
Ile Ile His Lys Gly Phe Asp Glu Arg His Ala Tyr Ile Gly Gly Met
      115          120          125
Phe Gly Ala Gly Ile Tyr Phe Ala Glu Asn Ser Ser Lys Ser Asn Gln
      130          135          140
Tyr Val Tyr Gly Ile Gly Gly Gly Thr Gly Cys Pro Val His Lys Asp
      145          150          155          160
Arg Ser Cys Tyr Ile Cys His Arg Gln Leu Leu Phe Cys Arg Val Thr
      165          170          175
Leu Gly Lys Ser Phe Leu Gln Phe Ser Ala Met Lys Met Ala His Ser
      180          185          190
Pro Pro Gly His His Ser Val Thr Gly Arg Pro Ser Val Asn Gly Leu
      195          200          205
Ala Leu Ala Glu Tyr Val Ile Tyr Arg Gly Glu Gln Ala Tyr Pro Glu
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<210> 6267

<211> 328

<212> DNA

<213> Homo sapiens

<400> 6267

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120

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gatgagcctt tctgcagtt ccgaaggaac gtgttcttcc caaagcggcg ggagctccag
180

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atccatgacg aggaggtcct gcggtgctc tatgaggagg ccaagggcaa cgtgctggct
240

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gcacggtacc cgtgcgacgt ggaggactgc gaggtcttgg gcgccctggg gtgcgcgctg
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328

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<210> 6268

<211> 83

<212> PRT

<213> Homo sapiens

<400> 6268

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 Leu Gln Ile His Asp Glu Glu Val Leu Arg Leu Leu Tyr Glu Glu Ala
 35 40 45
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<210> 6269

<211> 923

<212> DNA

<213> Homo sapiens

<400> 6269

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 420
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<210> 6270

<211> 307
 <212> PRT
 <213> Homo sapiens

<400> 6270
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 35 40 45
 Asn Phe Val Ser Lys Glu Glu Phe Gln Ala Val Glu Lys Lys Leu Val
 50 55 60
 Glu Glu Lys Ala Ala His Ala Lys Thr Lys Val Leu Leu Ala Lys Glu
 65 70 75 80
 Glu Glu Lys Leu Gln Phe Ala Leu Gly Glu Val Glu Val Leu Ser Lys
 85 90 95
 Gln Leu Glu Lys Glu Lys Leu Ala Phe Glu Lys Ala Leu Ser Ser Val
 100 105 110
 Lys Ser Lys Val Leu Gln Glu Ser Ser Lys Lys Asp Gln Leu Ile Thr
 115 120 125
 Lys Cys Asn Glu Ile Glu Ser His Ile Ile Lys Gln Glu Asp Ile Leu
 130 135 140
 Asn Gly Lys Glu Asn Glu Ile Lys Glu Leu Gln Gln Val Ile Ser Gln
 145 150 155 160
 Gln Lys Gln Ile Phe Ser Pro Pro Pro Ala Gly Ser Val Ala Gly Ile
 165 170 175
 Thr Cys Leu Thr Ser Gly Ser Arg Ser Ser Arg Lys Ala Thr Trp Pro
 180 185 190
 Arg Cys Trp Thr Arg Ser Ile Arg Lys Pro Gln Gly His Val Arg Pro
 195 200 205
 Ala Ala Thr Ser Ile Pro Gly Lys Asn Lys Met Ala Ala Ala Phe Leu
 210 215 220
 Phe Ser Gly Cys Asn Pro Gln Pro Leu Pro Ser Leu Leu Trp Glu Ser
 225 230 235 240
 Pro Ala Ser Ser Pro Cys Tyr Phe Pro Pro Ser Trp Ile Val Val Gly
 245 250 255
 Val His Lys Val Gly Ala Cys Ser Leu Gly Glu Glu Leu Gly Leu Cys
 260 265 270
 Cys Leu Val Gly Thr Thr Ala Ser Phe Gly Tyr Leu Ile Pro Ser Tyr
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 Leu Val Asn
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<210> 6271
 <211> 1437
 <212> DNA
 <213> Homo sapiens

<400> 6271
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<210> 6272

<211> 296

<212> PRT

<213> Homo sapiens

<400> 6272

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Leu	Glu	Val	Ile	Lys	Thr	Arg	Leu	Gln	Ser	Ser	Arg	Leu	Ala	Leu	Arg
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Thr	Val	Tyr	Tyr	Pro	Gln	Val	His	Leu	Gly	Thr	Ile	Ser	Gly	Ala	Gly
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Ala	Ala	Phe	Ile	Thr	Asn	Ser	Leu	Met	Asn	Pro	Ile	Trp	Met	Val	Lys
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Thr	Arg	Met	Gln	Leu	Glu	Gln	Lys	Val	Arg	Gly	Ser	Lys	Gln	Met	Asn
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			165						170					175	
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		180						185				190			
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Ile	Ala	Tyr	Pro	His	Glu	Val	Ile	Arg	Thr	Arg	Leu	Arg	Glu	Glu	Gly
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			245					250						255	
Glu	Gly	Tyr	Leu	Ala	Phe	Tyr	Arg	Gly	Leu	Phe	Ala	Gln	Leu	Ile	Arg
		260					265					270			
Gln	Ile	Pro	Asn	Thr	Ala	Ile	Val	Leu	Ser	Thr	Tyr	Glu	Leu	Ile	Val
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<210> 6273

<211> 2355

<212> DNA

<213> Homo sapiens

<400> 6273

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<210> 6274
 <211> 70
 <212> PRT
 <213> Homo sapiens

<400> 6274
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 Gln Ala Gln His Phe Ser Leu Leu Tyr Lys Thr Val Gln Arg Leu Leu
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<210> 6275
 <211> 1534
 <212> DNA
 <213> Homo sapiens

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<210> 6276

<211> 172

<212> PRT

<213> Homo sapiens

<400> 6276

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His	Ala	Glu	Glu	Met	Glu	Leu	Leu	Leu	Glu	Asn	Tyr	Tyr	Arg	Leu	Ala
			20					25					30		
Asp	Asp	Leu	Ser	Asn	Ala	Ala	Arg	Glu	Leu	Arg	Val	Leu	Ile	Asp	Asp
		35					40					45			
Ser	Gln	Ser	Ile	Ile	Phe	Ile	Asn	Leu	Asp	Ser	His	Arg	Asn	Val	Met
	50					55					60				
Ile	Arg	Leu	Asn	Leu	Gln	Leu	Thr	Met	Gly	Thr	Phe	Ser	Leu	Ser	Leu

65		70		75		80
Phe	Gly	Leu	Met	Gly	Val	Ala
		85		90		95
Glu	Glu	Asp	His	Arg	Ile	Phe
		100		105		110
Gly	Ser	Gly	Leu	Ile	Trp	Arg
		115		120		125
Leu	Glu	Ala	Pro	Leu	Pro	Pro
		130		135		140
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Gly	Leu	Gly	Ser	Gly	Arg	Ser
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<210> 6277
 <211> 1206
 <212> DNA
 <213> Homo sapiens

<400> 6277
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<212> DNA

<213> Homo sapiens

<400> 6279

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<213> Homo sapiens

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<211> 2542

<212> DNA

<213> Homo sapiens

<400> 6285

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<213> Homo sapiens

<400> 6286

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<210> 6287

<211> 1674

<212> DNA

<213> Homo sapiens

<400> 6287

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<212> PRT

<213> Homo sapiens

<400> 6288

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           35           40           45
Ser Val Lys Leu Asp Glu His Ile Ile Pro Leu Gly Ser Met Ala Ile
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Asn Ser Ile Ser Lys Leu Thr Gln Leu Thr Gln Ser Ser Met Tyr Ser
65           70           75           80
Leu Pro Asn Ala Pro Thr Leu Ala Asp Leu Glu Asp Asp Thr His Glu
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Ala Ser Asp Asp Gln Pro Glu Lys Pro His Phe Asp Ser Arg Ser Val
           100          105          110
Ile Phe Glu Leu Asp Ser Cys Asn Gly Ser Gly Lys Val Cys Leu Val
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Tyr Lys Ser Gly Lys Pro Ala Leu Ala Glu Asp Thr Glu Ile Trp Phe
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Leu Asp Arg Ala Leu Tyr Trp His Phe Leu Thr Asp Thr Phe Thr Ala
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Tyr Tyr Arg Leu Leu Ile Thr His Leu Gly Leu Pro Gln Trp Gln Tyr
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<210> 6289

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<212> DNA

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<210> 6290

<211> 172

<212> PRT

<213> Homo sapiens

<400> 6290

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Ala	Lys	Leu	Val	Asn	Ile	Arg	Lys	Glu	Met	Leu	Met	Leu	His	Glu	Lys
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Lys	Glu	Glu	Leu	Glu	Arg	Glu	Gln	Gln	Arg	Glu	Lys	Gly	Phe	Glu	Arg
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<210> 6291

<211> 2718

<212> DNA

<213> Homo sapiens

<400> 6291

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<211> 497

<212> PRT

<213> Homo sapiens

<400> 6292

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			195			200						205			
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385      390      395      400
Leu Gly Ile Ala Asn Asn Arg Leu Ile Arg Ile Asp Leu Ala Val Gly
      405      410      415
Asp Val Val Lys Thr Trp Arg Phe Ser Asn Met Arg Gln Trp Asn Val
      420      425      430
Asn Trp Asp Ile Arg Gln Val Ala Ile Glu Phe Asp Glu His Ile Asn
      435      440      445
Val Ala Phe Ser Cys Val Ser Ala Ser Cys Arg Ile Val His Glu Tyr
450      455      460
Ile Gly Gly Tyr Ile Phe Leu Ser Thr Arg Glu Arg Ala Arg Gly Glu
465      470      475      480
Glu Leu Asp Glu Asp Leu Phe Leu Gln Leu Thr Gly Gly His Glu Ala
      485      490      495
Phe

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<210> 6293

<211> 750

<212> DNA

<213> Homo sapiens

<400> 6293

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120
gtggaggcgg tggccagact gaagcgttcc cggctgaagg tgaggttctg caccaacgag
180
tcgcagaagt cccgggcaga gctgggtggg cagcttcaga ggctgggatt tgacatctct
240
gagcaggagg taaccgcccc ggcaccagct gcctgccaga tctgaagga gcgaggcctg
300
cgaccatacc tgctcatcca tgacggagtc cgctcagaat ttgatcagat cgacacatcc
360
aacccaaact gtgtggtaat tgcagacgca ggagaaagct tttcttatca aaacatgaat
420
aacgccttcc aggtgctcat ggagctggaa aaacctgtgc tcatatcact gggaaaaggg
480
cgttactaca aggagacctc tggcctgatg ctggacgttg gtccctacat gaaggcgctt
540
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600
tctgccctgc aagcgatagg agtggaagcc caccaggccg tcatgattgg ggacgatatc
660
gtgggcgacg tcggcgggtg ccagcgggtg ggaatgagag cgctgcaggt gcgcaccggg
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750

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<210> 6294
 <211> 250
 <212> PRT
 <213> Homo sapiens

<400> 6294
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 20 25 30
 Gly Gly Thr Ala Ile Ala Gly Ser Val Glu Ala Val Ala Arg Leu Lys
 35 40 45
 Arg Ser Arg Leu Lys Val Arg Phe Cys Thr Asn Glu Ser Gln Lys Ser
 50 55 60
 Arg Ala Glu Leu Val Gly Gln Leu Gln Arg Leu Gly Phe Asp Ile Ser
 65 70 75 80
 Glu Gln Glu Val Thr Ala Pro Ala Pro Ala Ala Cys Gln Ile Leu Lys
 85 90 95
 Glu Arg Gly Leu Arg Pro Tyr Leu Leu Ile His Asp Gly Val Arg Ser
 100 105 110
 Glu Phe Asp Gln Ile Asp Thr Ser Asn Pro Asn Cys Val Val Ile Ala
 115 120 125
 Asp Ala Gly Glu Ser Phe Ser Tyr Gln Asn Met Asn Asn Ala Phe Gln
 130 135 140
 Val Leu Met Glu Leu Glu Lys Pro Val Leu Ile Ser Leu Gly Lys Gly
 145 150 155 160
 Arg Tyr Tyr Lys Glu Thr Ser Gly Leu Met Leu Asp Val Gly Pro Tyr
 165 170 175
 Met Lys Ala Leu Glu Tyr Ala Cys Gly Ile Lys Ala Glu Val Val Gly
 180 185 190
 Lys Pro Ser Pro Glu Phe Phe Lys Ser Ala Leu Gln Ala Ile Gly Val
 195 200 205
 Glu Ala His Gln Ala Val Met Ile Gly Asp Asp Ile Val Gly Asp Val
 210 215 220
 Gly Gly Ala Gln Arg Cys Gly Met Arg Ala Leu Gln Val Arg Thr Gly
 225 230 235 240
 Lys Phe Arg Pro Ser Asp Glu His His Pro
 245 250

<210> 6295
 <211> 2091
 <212> DNA
 <213> Homo sapiens

<400> 6295
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 120
 cgccgcggcg cagccctccg gctgtggggc cgggtagttg aacgggtcga ggccggggga
 180
 ggcgtggggc cgtttcaggc ctgcggctgt cggctggtgc ttggcggcag ggacgatgtg
 240

agtgcggggc tgagaggcag ccatggggcc cgcggtgagc ccttggaacc ggcgcgcccc
300
ttgcagaggc ctcccagacc cgaggtgccc agggcattcc ggaggcagcc gagggcagca
360
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420
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480
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540
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600
aacctccagc agtacgatct cccgtacccc gagggcattt ttgaactccc attcttcttt
660
cacaacccca agcccttttt cactttggcc aaggagctgt accctggaaa ctacaagccc
720
aacgtcactc actactttct cggctgctt catgacaagg ggctgcttct gcgctctac
780
acgcagaaca tcgatgggct tgagagagtg tcgggcatcc ctgcctcaaa gctggttgaa
840
gctcatggaa cctttgcctc tgccaactgc acagtctgcc aaagaccctt cccaggggag
900
gacattcggg ctgacgtgat ggcagacagg gttccccgct gcccggtctg caccggcggt
960
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1020
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1140
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1200
gttcacggcg tggaaagcct agtggagctt ctgggctgga cagaagagat gcgggacctt
1260
gtgcagcggg aaactgggaa gcttgatgga ccagacaaat aggatgatgg cttgaccgag
1320
gccgtgcgga cgtcagttcc ccgactgctc atcaaccggg acttggtggg gcccttggt
1380
tggcatcctc gcagcagga cgtggcccag ctgggggacg tggttcacgg cgtggaaagc
1440
ctagtggagc ttctgggctg gacagaagag atgcgggacc ttgtgcagcg ggaaactggg
1500
aagcttgatg gaccagacaa ataggatgat ggctgcccc acacaataaa tggtaacata
1560
ggagacatcc acatcccaat tctgacaaga cctcatgcct gaagacagct tgggcaggtg
1620
aaaccagaat atgtgaactg agtggacacc cgaggctgcc actggaatgt cttctcaggc
1680
catgagctgc agtgactggt agggctgtgt ttacagtcag ggccaccccg tcacatatac
1740
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1800
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1860

ccgagtctgc tttctgtgcc tagttgaacg gcaagctcgg catctgttgg ttacaagatc
 1920
 cagacttgagg ccgagcgggc cccagccctc ttcattgtcc gaagtgtagt cttgaggccc
 1980
 tgggtgccga cttctagcat gttggtctcc tttagtgggg ctatttttaa tgagagaaaa
 2040
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 2091

<210> 6296

<211> 399

<212> PRT

<213> Homo sapiens

<400> 6296

Met	Ala	Phe	Trp	Gly	Trp	Arg	Ala	Ala	Ala	Ala	Leu	Arg	Leu	Trp	Gly	1	5	10	15
Arg	Val	Val	Glu	Arg	Val	Glu	Ala	Gly	Gly	Gly	Val	Gly	Pro	Phe	Gln	20	25	30	
Ala	Cys	Gly	Cys	Arg	Leu	Val	Leu	Gly	Gly	Arg	Asp	Asp	Val	Ser	Ala	35	40	45	
Gly	Leu	Arg	Gly	Ser	His	Gly	Ala	Arg	Gly	Glu	Pro	Leu	Asp	Pro	Ala	50	55	60	
Arg	Pro	Leu	Gln	Arg	Pro	Pro	Arg	Pro	Glu	Val	Pro	Arg	Ala	Phe	Arg	65	70	75	80
Arg	Gln	Pro	Arg	Ala	Ala	Ala	Pro	Ser	Phe	Phe	Phe	Ser	Ser	Ile	Lys	85	90	95	
Gly	Gly	Arg	Arg	Ser	Ile	Ser	Phe	Ser	Val	Gly	Ala	Ser	Ser	Val	Val	100	105	110	
Gly	Ser	Gly	Gly	Ser	Ser	Asp	Lys	Gly	Lys	Leu	Ser	Leu	Gln	Asp	Val	115	120	125	
Ala	Glu	Leu	Ile	Arg	Ala	Arg	Ala	Cys	Gln	Arg	Val	Val	Val	Met	Val	130	135	140	
Gly	Ala	Gly	Ile	Ser	Thr	Pro	Ser	Gly	Ile	Pro	Asp	Phe	Arg	Ser	Pro	145	150	155	160
Gly	Ser	Gly	Leu	Tyr	Ser	Asn	Leu	Gln	Gln	Tyr	Asp	Leu	Pro	Tyr	Pro	165	170	175	
Glu	Ala	Ile	Phe	Glu	Leu	Pro	Phe	Phe	Phe	His	Asn	Pro	Lys	Pro	Phe	180	185	190	
Phe	Thr	Leu	Ala	Lys	Glu	Leu	Tyr	Pro	Gly	Asn	Tyr	Lys	Pro	Asn	Val	195	200	205	
Thr	His	Tyr	Phe	Leu	Arg	Leu	Leu	His	Asp	Lys	Gly	Leu	Leu	Leu	Arg	210	215	220	
Leu	Tyr	Thr	Gln	Asn	Ile	Asp	Gly	Leu	Glu	Arg	Val	Ser	Gly	Ile	Pro	225	230	235	240
Ala	Ser	Lys	Leu	Val	Glu	Ala	His	Gly	Thr	Phe	Ala	Ser	Ala	Thr	Cys	245	250	255	
Thr	Val	Cys	Gln	Arg	Pro	Phe	Pro	Gly	Glu	Asp	Ile	Arg	Ala	Asp	Val	260	265	270	
Met	Ala	Asp	Arg	Val	Pro	Arg	Cys	Pro	Val	Cys	Thr	Gly	Val	Val	Lys	275	280	285	
Pro	Asp	Ile	Val	Phe	Phe	Gly	Glu	Pro	Leu	Pro	Gln	Arg	Phe	Leu	Leu	290	295	300	
His	Val	Val	Asp	Phe	Pro	Met	Ala	Asp	Leu	Leu	Leu	Ile	Leu	Gly	Thr				

```

305          310          315          320
Ser Leu Glu Val Glu Pro Phe Ala Ser Leu Thr Glu Ala Val Arg Ser
          325          330          335
Ser Val Pro Arg Leu Leu Ile Asn Arg Asp Leu Val Gly Pro Leu Ala
          340          345          350
Trp His Pro Arg Ser Arg Asp Val Ala Gln Leu Gly Asp Val Val His
          355          360          365
Gly Val Glu Ser Leu Val Glu Leu Leu Gly Trp Thr Glu Glu Met Arg
          370          375          380
Asp Leu Val Gln Arg Glu Thr Gly Lys Leu Asp Gly Pro Asp Lys
385          390          395

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<210> 6297

<211> 472

<212> DNA

<213> Homo sapiens

<400> 6297

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120
ttcgggaagcc cgttcggcct ggaggagccg cagtgggtcc cggacaagga gtgtcggaga
180
tgtatgcagt gtgacgcca gtttgacttt ctcaccagaa agcaccactg tcgccgctgc
240
gggaagtgtc tctgcgacag gtgctgcagc cagaaggtgc cgctgcggcg catgtgcttt
300
gtggaccccc tgcggcagtg cgcggagtg ggccttggtgt ccctcaagga ggccgagttc
360
tacgacaagc agctcaaagt gtcctgagc ggtaaggacg ggtgtcctgc acagtctctg
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gcgctccgcc agccggctcc tcgtgtctgt ggcgatgctg tgggctgtgc ac
472

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<210> 6298

<211> 146

<212> PRT

<213> Homo sapiens

<400> 6298

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Met Ser Ser Glu Val Ser Ala Arg Arg Asp Ala Lys Lys Leu Val Arg
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Ser Pro Ser Gly Leu Arg Met Val Pro Glu His Arg Ala Phe Gly Ser
          20          25          30
Pro Phe Gly Leu Glu Glu Pro Gln Trp Val Pro Asp Lys Glu Cys Arg
          35          40          45
Arg Cys Met Gln Cys Asp Ala Lys Phe Asp Phe Leu Thr Arg Lys His
          50          55          60
His Cys Arg Arg Cys Gly Lys Cys Phe Cys Asp Arg Cys Cys Ser Gln
          65          70          75          80
Lys Val Pro Leu Arg Arg Met Cys Phe Val Asp Pro Val Arg Gln Cys
          85          90          95
Ala Glu Cys Ala Leu Val Ser Leu Lys Glu Ala Glu Phe Tyr Asp Lys

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100 105 110
 Gln Leu Lys Val Leu Leu Ser Gly Lys Asp Gly Cys Pro Ala Gln Ser
 115 120 125
 Cys Ala Leu Arg Gln Pro Ala Pro Arg Val Cys Gly Asp Ala Val Gly
 130 135 140
 Cys Ala
 145

<210> 6299

<211> 1466

<212> DNA

<213> Homo sapiens

<400> 6299

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 120
 ggcggccagc ccgcccattg gcccgaggag agcctggttc tgtaccactg gacccagtcc
 180
 ttcagctcgc agaaggtgcg gctggtgatc gccgagaagg gcctggtgtg cgaggagcgg
 240
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 300
 gaggaggtgc ccgtcatcat ccaccgcgac aacatcatca gtgactatga ccagatcatt
 360
 gactatgtgg agcgcacctt cacaggagag cacgtggtgg ccctgatgcc cgagggtgggc
 420
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 480
 gcctacacgc atggctgcat cctgcatccc gagctcacca ccgactccat gatccccaag
 540
 tacgccacgg ccgagatccg cagacattta gccaatgcca ccacggacct catgaaactg
 600
 gaccatgaag aggagcccca gctctccgag ccctaccttt ctaaacaaaa gaagctcatg
 660
 gccaaatctt tggagcatga tgatgtgagc tacctgaaga agatcctcgg ggaactggcc
 720
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 780
 aaatgcgagc tgtggctctg tggctgtgcc ttcaccctcg ctgatgtcct cctgggagcc
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 900
 cccaacctgc agtccttctt tgagaggggtc cagagacgct ttgccttccg gaaagtcctg
 960
 ggtgacatcc acaccacctt gctgtcggcc gtcatcccca atgctttccg gctggtcaag
 1020
 aggaaacccc catccttctt cggggcgctc ttctcatgg gctccctggg tgggatgggc
 1080
 tactttgcct actggtacct caagaaaaaa tacatctagg gccaggcctg gggcttgggtg
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 1200

tcatgaacac ttggacagcc ctccccgccc ttcgttctga gtaataatac cgtcagtgtg
 1260
 aaaacattcc gtagttttaga agtagacggt gcaaattgctg tgactcaagg ccacggctct
 1320
 gctaaaagag agagaaggaa cgagagagag agagaaaaaa caaaaaacca gaaaaccacg
 1380
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 1440
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 1466

<210> 6300

<211> 372

<212> PRT

<213> Homo sapiens

<400> 6300

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 Leu Gln Leu Val Ala His Leu Arg Ala Gly Glu Arg Cys Gly Gln Ala
 20 25 30
 Ser Gly Gly Pro Arg Arg Ser Arg Gly Gly Gln Pro Ala His Trp Pro
 35 40 45
 Arg Glu Ser Leu Val Leu Tyr His Trp Thr Gln Ser Phe Ser Ser Gln
 50 55 60
 Lys Val Arg Leu Val Ile Ala Glu Lys Gly Leu Val Cys Glu Glu Arg
 65 70 75 80
 Asp Val Ser Leu Pro Gln Ser Glu His Lys Glu Pro Trp Phe Met Arg
 85 90 95
 Leu Asn Leu Gly Glu Glu Val Pro Val Ile Ile His Arg Asp Asn Ile
 100 105 110
 Ile Ser Asp Tyr Asp Gln Ile Ile Asp Tyr Val Glu Arg Thr Phe Thr
 115 120 125
 Gly Glu His Val Val Ala Leu Met Pro Glu Val Gly Ser Leu Gln His
 130 135 140
 Ala Arg Val Leu Gln Tyr Arg Glu Leu Leu Asp Ala Leu Pro Met Asp
 145 150 155 160
 Ala Tyr Thr His Gly Cys Ile Leu His Pro Glu Leu Thr Thr Asp Ser
 165 170 175
 Met Ile Pro Lys Tyr Ala Thr Ala Glu Ile Arg Arg His Leu Ala Asn
 180 185 190
 Ala Thr Thr Asp Leu Met Lys Leu Asp His Glu Glu Glu Pro Gln Leu
 195 200 205
 Ser Glu Pro Tyr Leu Ser Lys Gln Lys Lys Leu Met Ala Lys Ile Leu
 210 215 220
 Glu His Asp Asp Val Ser Tyr Leu Lys Lys Ile Leu Gly Glu Leu Ala
 225 230 235 240
 Met Val Leu Asp Gln Ile Glu Ala Glu Leu Glu Lys Arg Lys Leu Glu
 245 250 255
 Asn Glu Gly Gln Lys Cys Glu Leu Trp Leu Cys Gly Cys Ala Phe Thr
 260 265 270
 Leu Ala Asp Val Leu Leu Gly Ala Thr Leu His Arg Leu Lys Phe Leu
 275 280 285
 Gly Leu Ser Lys Lys Tyr Trp Glu Asp Gly Ser Arg Pro Asn Leu Gln

290		295		300
Ser Phe Phe Glu Arg Val Gln Arg Arg Phe Ala Phe Arg Lys Val Leu				
305		310		320
Gly Asp Ile His Thr Thr Leu Leu Ser Ala Val Ile Pro Asn Ala Phe				
	325		330	335
Arg Leu Val Lys Arg Lys Pro Pro Ser Phe Phe Gly Ala Ser Phe Leu				
	340		345	350
Met Gly Ser Leu Gly Gly Met Gly Tyr Phe Ala Tyr Trp Tyr Leu Lys				
	355		360	365
Lys Lys Tyr Ile				
370				

<210> 6301

<211> 911

<212> DNA

<213> Homo sapiens

<400> 6301

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120
ccgaagctct cgctgactct gtccagctca gtgtctcgag ggaatgtgtc cactccccc
180
cgccacagca gtggaagcct tactcccccc gtgacccccc ccatcaccac ctcctcttca
240
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300
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360
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480
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600
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720
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900
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<210> 6302

<211> 202

<212> PRT

<213> Homo sapiens

<400> 6302

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 20 25 30
 Glu Ser Leu Lys Lys Lys Ile Gln Pro Lys Leu Ser Leu Thr Leu Ser
 35 40 45
 Ser Ser Val Ser Arg Gly Asn Val Ser Thr Pro Pro Arg His Ser Ser
 50 55 60
 Gly Ser Leu Thr Pro Pro Val Thr Pro Pro Ile Thr Pro Ser Ser Ser
 65 70 75 80
 Phe Arg Ser Ser Thr Pro Thr Gly Ser Glu Tyr Asp Glu Glu Glu Val
 85 90 95
 Asp Tyr Glu Glu Ser Asp Ser Asp Glu Ser Trp Thr Thr Glu Ser Ala
 100 105 110
 Ile Ser Ser Glu Ala Ile Leu Ser Ser Met Cys Met Asn Gly Gly Glu
 115 120 125
 Glu Lys Pro Phe Ala Cys Pro Val Pro Gly Cys Lys Lys Arg Tyr Lys
 130 135 140
 Asn Val Asn Gly Ile Lys Tyr His Ala Lys Asn Gly His Arg Thr Gln
 145 150 155 160
 Ile Arg Val Arg Lys Pro Phe Lys Cys Arg Cys Gly Lys Ser Tyr Lys
 165 170 175
 Thr Ala Gln Gly Leu Arg His His Thr Ile Asn Phe His Pro Pro Val
 180 185 190
 Ser Ala Glu Ile Ile Arg Lys Met Gln Gln
 195 200

<210> 6303

<211> 676

<212> DNA

<213> Homo sapiens

<400> 6303

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 120
 gctgaaacaa tgagaatagt gctggaacgc tgctacaatg atttgcgtct tctcagtgtc
 180
 tccagtaaaa ccttgaaagc tgaaggattt tttagaagta acaagggtgtt tgttgaaagc
 240
 tccgagactt tggattacca gatggccttt gcagactctc atttatggaa actcctggat
 300
 cggcatgcaa atacaatcag attatttggt ttgctacctg aacaatcccc agtatcttat
 360
 tccaaaagga cagcatacca gaaagctgga ggcgattctg gtaatgtgga tgatgactgt
 420
 gaaagagtca aaggacctgt aggaagccta aagtctgtgg aagctattct agaagaaagc
 480
 actgaaaaac tcaaaagctt gtcactgcag caacagcagg atggagataa tggggacagc
 540

agcaaaaagta ctgagacaag tgactttgaa aacatogaat cacctctcaa tgagaggac
 600
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 660
 aaattttcag tctgaa
 676

<210> 6304
 <211> 181
 <212> PRT
 <213> Homo sapiens

<400> 6304
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 35 40 45
 Asp Ser His Leu Trp Lys Leu Leu Asp Arg His Ala Asn Thr Ile Arg
 50 55 60
 Leu Phe Val Leu Leu Pro Glu Gln Ser Pro Val Ser Tyr Ser Lys Arg
 65 70 75 80
 Thr Ala Tyr Gln Lys Ala Gly Gly Asp Ser Gly Asn Val Asp Asp Asp
 85 90 95
 Cys Glu Arg Val Lys Gly Pro Val Gly Ser Leu Lys Ser Val Glu Ala
 100 105 110
 Ile Leu Glu Glu Ser Thr Glu Lys Leu Lys Ser Leu Ser Leu Gln Gln
 115 120 125
 Gln Gln Asp Gly Asp Asn Gly Asp Ser Ser Lys Ser Thr Glu Thr Ser
 130 135 140
 Asp Phe Glu Asn Ile Glu Ser Pro Leu Asn Glu Arg Asp Ser Ser Ala
 145 150 155 160
 Ser Val Asp Asn Arg Glu Leu Glu Gln His Ile Gln Thr Ser Asp Pro
 165 170 175
 Glu Lys Phe Ser Val
 180

<210> 6305
 <211> 3853
 <212> DNA
 <213> Homo sapiens

<400> 6305
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 120
 aaattccggc atgtgttcgg gcagccggtc aagaacgacc agtgctatga ggacattcgc
 180
 gtgtcccgtg ttacctggga cagcaccttc tgcgccgtca accccaagtt cctggcggtg
 240
 attgtggagg ccagtggagg ggggtgcctt ctggtgctcc ccctaagcaa gacgggcccgc
 300

attgacaagg cctaccctac agtatgtggg cacacaggac cagtgtctgga catcgactgg
360
tgccccacata acgatcaggt cattgccagc gggttcagagg actgcacggg catgggtatgg
420
cagatcccag aaaatggact cacctccccg ctgacagagc cgggtgggtgg actggagggg
480
cacaccaagc gagtgggcat catcgcttgg caccacacgg ccgaaacgt gctgtcagt
540
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<211> 474

<212> PRT

<213> Homo sapiens

<400> 6306

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Pro Lys Arg Gly Leu Asp Val Asn Lys Cys Glu Ile Ala Arg Phe Phe
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Lys Leu His Glu Arg Lys Cys Glu Pro Ile Ile Met Thr Val Pro Arg
      340      345      350
Lys Ser Asp Leu Phe Gln Asp Asp Leu Tyr Pro Asp Thr Ala Gly Pro
      355      360      365
Glu Ala Ala Leu Glu Ala Glu Glu Trp Phe Glu Gly Lys Asn Ala Asp
 370      375      380
Pro Ile Leu Ile Ser Leu Lys His Gly Tyr Ile Pro Gly Lys Asn Arg
 385      390      395      400
Asp Leu Lys Val Val Lys Lys Asn Ile Leu Asp Ser Lys Pro Thr Ala
      405      410      415
Asn Lys Lys Cys Asp Leu Ile Ser Ile Pro Lys Lys Thr Thr Asp Thr
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Ala Ser Val Gln Asn Glu Ala Lys Leu Asp Glu Ile Leu Lys Glu Ile
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<210> 6307

<211> 2119

<212> DNA

<213> Homo sapiens

<400> 6307

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<211> 483

<212> PRT

<213> Homo sapiens

<400> 6308

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Val Asp Asp Met Leu Gln Glu Asn His Gln Arg Val Ser Ile Phe Phe
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Asp Ser Ser Gln Tyr Val Gln Cys Val Ala Gly Cys Leu Gln Leu Met
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Val His Lys Ser Glu Lys Phe Trp Arg Glu Asn Ala Val Arg Leu Asn
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Glu Lys Asn Tyr Glu Leu Leu Lys Ile Leu Thr Lys Leu Leu Glu Val
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Ser Asp Asp Pro Gln Val Leu Ala Val Ala Ala His Asp Val Gly Glu

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<210> 6309

<211> 564

<212> DNA

<213> Homo sapiens

<400> 6309

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<210> 6310

<211> 83

<212> PRT

<213> Homo sapiens

<400> 6310

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 Leu Arg Leu Pro Glu Pro Gln Leu Leu Pro Glu Arg Arg Val Leu Ala
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<211> 1548

<212> DNA

<213> Homo sapiens

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<211> 234

<212> PRT

<213> Homo sapiens

<400> 6312

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Met	Gln	Ile	Ser	Gly	Ser	His	Ala	Lys	Pro	Gln	Gln	Pro	Ile	Phe	Val
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<210> 6313

<211> 725

<212> DNA

<213> Homo sapiens

<400> 6313

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What is claimed is:

1. An isolated nucleic acid molecule encoding a polypeptide comprising an amino acid sequence that is at least 85% identical to a polypeptide including an amino acid sequence selected from the group consisting of SEQ ID NO:2 n , wherein n is any integer 1-3161, or the complement thereof.
2. The isolated nucleic acid molecule of claim 1, said molecule hybridizing under stringent conditions to a nucleic acid sequence complementary to a nucleic acid molecule comprising the sequence of nucleotides selected from the group consisting of SEQ ID NO:2 n , wherein n is any integer 1-3161, or the complement thereof.
3. The isolated nucleic acid molecule of claim 1, said molecule encoding a polypeptide comprising the amino acid sequence selected from the group consisting of SEQ ID NO: 2 n , wherein n is any integer 1-3161, or an amino acid sequence comprising one or more conservative substitutions in the amino acid sequence selected from the group consisting of SEQ ID NO: 2 n .
4. The isolated nucleic acid molecule of claim 1, wherein said molecule encodes a polypeptide comprising the amino acid sequence selected from the group consisting of SEQ ID NO: 2 n , wherein n is any integer 1-3161.
5. The isolated nucleic acid molecule of claim 1, wherein said molecule comprises the sequence of nucleotides selected from the group consisting of SEQ ID NO:2 n -1, wherein n is any integer 1-3161, or the complement thereof.
6. An oligonucleotide less than 100 nucleotides in length and comprising at least contiguous nucleotides selected from the group consisting of SEQ ID NO:2 n -1, wherein n is any integer 1-3161, or the complement thereof.
7. A vector comprising the nucleic acid molecule of claim 1.

8. The vector of claim 7, wherein said vector is an expression vector.
9. A host cell comprising the isolated nucleic acid molecule of claim 1.
10. A substantially purified polypeptide comprising an amino acid sequence at least 80% identical to a polypeptide comprising the amino acid sequence selected from the group consisting of SEQ ID NO: 2*n*, wherein *n* is any integer 1-3161.
11. The polypeptide of claim 10, wherein said polypeptide comprises the amino acid sequence selected from the group consisting of SEQ ID NO: 2*n*, wherein *n* is any integer 1-3161.
12. An antibody that selectively binds to the polypeptide of claim 10.
13. A pharmaceutical composition comprising a therapeutically or prophylactically effective amount of a therapeutic selected from the group consisting of:
 - a) the nucleic acid of claim 1;
 - b) the polypeptide of claim 10; and
 - c) the antibody of claim 12;and a pharmaceutically acceptable carrier.
14. A kit comprising in one or more containers, a therapeutically or prophylactically effective amount of the pharmaceutical composition of claim 13.
15. A method of producing the polypeptide of claim 10, said method comprising culturing the host cell of claim 9 under conditions in which the nucleic acid molecule is expressed.
16. A method of detecting the presence of the polypeptide of claim 10 in a sample, comprising contacting the sample with a compound that selectively binds to said polypeptide under conditions allowing the formation of a complex between said polypeptide and said

compound, and detecting said complex, if present, thereby identifying said polypeptide in said sample.

17. A method of detecting the presence of a nucleic acid molecule of claim 1 in a sample, the method comprising contacting the sample with a nucleic acid probe or primer that selectively binds to the nucleic acid molecule and determining whether the nucleic acid probe or primer bound to the nucleic acid molecule of claim 1 is present in the sample.

18. A method for modulating the activity of the polypeptide of claim 10, the method comprising contacting a cell sample comprising the polypeptide of claim 10 with a compound that binds to said polypeptide in an amount sufficient to modulate the activity of the polypeptide.

19. The use of a therapeutic in the manufacture of a medicament for treating a syndrome associated with a ORFX-associated disorder, wherein said therapeutic is selected from the group consisting of:

- a) the nucleic acid of claim 1;
- b) the polypeptide of claim 10; and
- c) the antibody of claim 12.

20. A method for screening for a modulator of activity or of latency or predisposition to an ORFX-associated disorder, said method comprising:

- a) contacting a test compound with the polypeptide of claim 10; and
- b) determining if said test compound binds to said polypeptide,

wherein binding of said test compound to said polypeptide indicates the test compound is a modulator of activity or of latency or predisposition to an ORFX-associated disorder.

21. A method for screening for a modulator of activity or of latency or predisposition to an ORFX-associated disorder, said method comprising:

- a) administering a test compound to a test subject at an increased risk ORFX-associated disorder, wherein said test subject recombinantly expresses a polypeptide encoded by the nucleotide of claim 1;

- b) measuring expression the activity of said protein in said test subject;
- c) measuring the activity of said protein in a control subject that recombinantly expresses said protein and is not at increased risk for an ORFX-associated disorder; and
- d) comparing expression of said protein in said test subject and said control subject, wherein a change in the activity of said protein in said test subject relative to said control subject indicates the test compound is a modulator or of latency of predisposition to an ORFX-associated disorder.

22. The method of claim 20, wherein said test animal is a recombinant test animal that expresses a test protein transgene or expresses said transgene under the control of a promoter at an increased level relative to a wild-type test animal, and wherein said promoter is not the native gene promoter of said transgene.

23. A method for determining the presence of or predisposition to a disease associated with altered levels of a polypeptide of claim 11 in a subject, the method comprising:

- a) measuring the amount of the polypeptide in a sample from said subject; and
- b) comparing the amount of said polypeptide in step (a) to the amount of the polypeptide present in a control sample,

wherein an alteration in the level of the polypeptide in step (a) as compared to the control sample indicates the presence of or predisposition to a disease in said subject.

24. The method of claim 23, wherein said subject is a human.

25. A method for determining the presence of or predisposition to a disease associated with altered levels the nucleic acid molecule of claim 1 in a subject, the method comprising:

- a) measuring the amount of the nucleic acid in a sample from the mammalian subject; and
- b) comparing the amount of said nucleic acid in step (a) to the amount of the nucleic acid present in a control sample,

wherein an alteration in the level of the nucleic acid in step (a) as compared to the control sample indicates the presence of or predisposition to said disease in said subject.

26. The method of claim 25, wherein said subject is a human.

27. A method of treating or preventing a pathological condition associated with an ORFX-associated disorder in a subject, the method comprising administering to said subject polypeptide of claim 10 in an amount sufficient to alleviate or prevent said pathological condition.

28. The method of claim 27, wherein said subject is a human.

29. A method of treating or preventing a pathological condition associated with an ORFX-associated disorder in a subject, the method comprising administering to said subject nucleic acid molecule of claim 1 in an amount sufficient to alleviate or prevent said pathological condition.

30. The method of claim 29, wherein said subject is a human.

31. A method of treating or preventing a pathological condition associated with an ORFX-associated disorder in a subject, the method comprising administering to said subject antibody of claim 12 in an amount sufficient to alleviate or prevent said pathological condition.

32. The method of claim 31, wherein said subject is a human.

